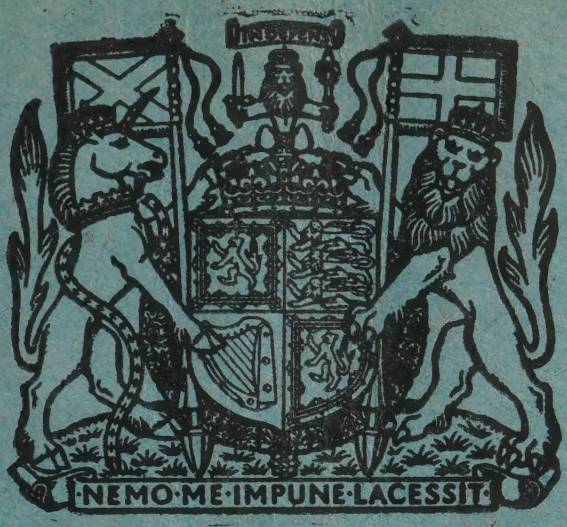

DEPARTMENT OF HEALTH FOR SCOTLAND

SCOTTISH HOSPITALS SURVEY

REPORT ON THE WESTERN REGION

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SCOTTISH HOSPITALS SURVEY

REPORT ON THE WESTERN REGION

by

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[*A General Introduction to the Regional Reports is printed as a separate document*].

INTRODUCTORY

1. Our report has been divided into two parts. The first part, which is not being published, comprises reports on the individual hospitals and the questionnaires completed by the managing bodies of the hospitals. These reports, which are entirely factual and contain no comment or advice, are too detailed for publication. A summary of each is, however, contained in the description of the hospital included in the appropriate sub-regional report. The second part, which follows, comprises a review of the hospital situation in the Western Region, with recommendations as to modifications or extensions of the hospital facilities necessary or desirable to secure a comprehensive Service. This part of the report is given in sections—

(i) A general survey of the Western Region, dealing with population statistics, areas of concentration of population, and short observations on the general hospital situation; and proposing a division of the Region into Sub-regions.

(ii) Special Memoranda on facilities for the treatment of cancer, on isolation hospitals, mental health, orthopaedic services, rehabilitation, and medical staffs.

(iii) Detailed reports on each Sub-region, showing the hospital services available and making recommendations.

(iv) Appendices of tabulated matter.

GENERAL SURVEY OF THE WESTERN REGION

2. **Area and Population.** The region as defined comprises the following eleven Counties: Argyll, Dunbarton, Lanark, Stirling, Clackmannan, Renfrew, Bute, Ayr, Wigtown, Kirkcudbright, and Dumfries. It includes the City of Glasgow and the Burghs of Dumbarton, Clydebank, Airdrie, Coatbridge, Hamilton, Motherwell and Wishaw, Rutherglen, Stirling, Falkirk, Paisley, Greenock, Port Glasgow, Kilmarnock, Ayr, and Dumfries.

3. It has a total population of 2,828,996, according to the estimate of the Registrar-General in 1938. The greater part of this population (approximately 2,086,668) is concentrated in the central industrial belt including Glasgow and Lanarkshire and parts of the adjacent Counties of Renfrew, Dunbarton, Stirling, and Clackmannan. Of this number over one and a half millions are located in Glasgow and the industrial part of Lanark. The densely populated districts of Ayr County—centred on Ayr, Kilmarnock, Ardrossan, and Saltcoats—provide a further 163,955. In the Registrar-General's Report on the Census of 1931 it is stated that the population in the west central division

of Scotland (Counties of Dunbarton, Renfrew, Ayr, and Lanark) was 91 per cent urban.

4. The following table shows the population of the Region in Counties :

County.	Census, 1931.	Registrar-General's Estimate, 1938.
Argyll	63,050	61,600
Ayr	285,217	294,050
Bute	18,823	16,560
Clackmannan	31,948	33,117
Dunbarton	147,744	155,243
Dumfries	81,047	81,818
Kirkcudbright	30,341	30,359
Lanark	1,586,047	1,635,937
Renfrew	288,586	317,179
Stirling	166,447	173,410
Wigtown	29,331	29,723
Totals	2,728,581	2,828,996

5. The region includes densely populated industrial districts, county aggregations, agricultural areas, and sparsely populated upland tracts of wide extent. The central and focal point in the region is the City of Glasgow.

6. **The Sub-regions.** After careful consideration of the region and having regard to the population distribution and the existing hospital facilities, we have come to the conclusion that for purposes of a hospital scheme it lends itself readily to division into sub-regions, each of which should be capable of supporting a fairly complete hospital service—up to, say, 90 per cent. of its requirements. These sub-regions should, therefore, be very largely independent of the centre as regards ordinary hospital services, though dependent on Glasgow for the more specialised services. The special circumstances of the Counties of Argyll and Bute, where the population is too scattered and too small to support a sub-regional service, make it inevitable that they should turn to Glasgow for the major part of their hospital services.

7. The following are the suggested Sub-regions :

Sub-region.	Centre.	Estimated Population served by Sub-region.
(1) Central Sub-region	Glasgow City	1,300,000
*(2) Renfrewshire East	Paisley	170,000
*(3) Renfrewshire West	Greenock	128,000
(4) Ayr County	Ayr and Kilmarnock	294,000
(5) Lanarkshire	Motherwell	429,000
(6) Stirling and Clackmannan Counties	Stirling and Falkirk	200,000
(7) Dumfries, Wigtown, and Kirkcudbright Counties	Dumfries	142,000
(8) Dunbarton County	Dumbarton	79,000
		2,742,000

* It may be considered better, or more expedient, to have the whole of Renfrew County as one sub-region, subdivided if thought necessary into two administrative districts.

8. The boundaries of the region and the sub-regions should not be adhered to too rigidly, and due attention should be paid in the working of the scheme to the convenience of the population in the marginal areas and the natural

flow of cases to a particular hospital centre. For example, it will probably be found that from parts of West Perthshire patients will naturally turn to Stirling or Glasgow, and in the eastern part of Dumfries County there will be a natural flow towards Carlisle. In the sub-regions also there may be special circumstances rendering it necessary for people in the boundary zones to go to hospitals in an adjoining sub-region. Thus the hospitals in the City of Glasgow will have to serve areas outside the city proper, which belong to other sub-regions. For example, Rutherglen, adjacent parts of Lanarkshire, Renfrewshire, and Dunbartonshire have populations which are already served by Glasgow, and have readier access to the Glasgow hospitals than to hospitals placed centrally in their own sub-regions. We estimate that the total population which would have recourse to the Glasgow Sub-region would amount to over 1,300,000.

9. The situation in Dunbarton County is difficult. If Clydebank and the populous suburban districts of Milngavie and Bearsden, together with the detached part of the county, continue to look to Glasgow for their hospital services, the population remaining in the sub-regional scheme would be about 79,000. This is a very small figure to support a general hospital. Nevertheless, after considering the matter in detail we have come to the conclusion that Dunbartonshire should ultimately be developed as a sub-region with its centre at Dumbarton. The present hospital provision for both general purposes and maternity is scanty, and it would be necessary to make a new start, and also to improve greatly the existing accommodation for infectious disease and tuberculosis, before anything like a sub-regional service could be commenced. Until the new building is available, Dunbarton must continue to depend on Glasgow.

10. In Argyll and Bute there are no hospitals which could be classified as district hospitals, and in these counties the system of small cottage hospitals will have to continue for the treatment of certain emergencies and other cases. Major cases which can be transported will require to come to Glasgow. It may be possible to improve the services of the cottage hospitals by having a county surgeon available and stationed at the most convenient centre from which he could reach at least some of them in a reasonable time. The islands, however, are beyond the possibility of such an arrangement in the meantime, and must continue to depend upon the local practitioners. It would be a good thing if periodic visits could be made to these outlying hospitals by consultants from Glasgow.

11. In the following paragraphs we give a general survey of the hospital situation in the West of Scotland, with brief observations on the present state of the hospitals in the various categories.

12. **The Main General Hospitals (Central Hospitals).** This group includes the three main Glasgow voluntary hospitals (the Royal, Western, and Victoria Infirmaries) and, for certain purposes, the two main municipal hospitals (Stobhill and the Southern General Hospital). All these are teaching hospitals; the Western Infirmary and the Royal Infirmary have a particularly close connection with the University. The Royal Infirmary is of most recent construction, having been rebuilt between 1905 and 1915. The others date from last century, but have had many alterations and extensions at various times since then. The Canniesburn annexe of the Royal Infirmary, for convalescents and private patients, was opened in 1938. The Philipshill annexe of the Victoria Infirmary, for convalescents and orthopaedic cases, was opened in 1943.

13. **District General Hospitals.** This group includes the main voluntary infirmaries in Stirling, Falkirk, Greenock, Paisley, Ayr, Kilmarnock, and

Dumfries. Of these, Stirling Royal Infirmary and Falkirk Infirmary are of recent construction, though they perpetuate many of the features of the older designs. The remainder are all on the standards of the late nineteenth century and are deficient in many respects, notably in out-patient accommodation, but also ward facilities, nurses' accommodation, and laboratory and X-ray services. At Greenock, where the deficiencies in the old building are recognised, a start has been made to establish a modern hospital at Larkfield on the outskirts of the town.

14. **Country General Hospitals.** In this group there are Hairmyres and Mearnskirk hospitals and also the E.M.S. hutted hospitals at Killearn, Law Junction, and Ballochmyle. The first two are country hospitals of modern design—the one formerly devoted to pulmonary tuberculosis, the other to non-pulmonary tuberculosis—which have been enlarged by the addition of hutted wards. For some purposes Robroyston Hospital and Stonehouse Hospital may also be included in this group.

15. The hutted wards and hospitals were built as war emergency units and to make them suitable for continued peace-time occupation will require considerable expenditure. Central heating will have to be installed and considerable additions to the ward services will be needed. To give adequate peace-time standards of bed spacing and other facilities the accommodation as now stated must be stepped down by 30 per cent. Subject to these changes, however, these country general hospitals may be expected to take a permanent place in the regional hospital service. Indeed they have already played a valuable part in the hospital care of the civilian population, particularly in providing accommodation for certain key services which could not readily be housed in the city hospitals. In this connection we may instance the neuro-surgical unit at Killearn, which is organised in association with the University, the Corporation of Glasgow, and the main Glasgow teaching hospitals; the orthopaedic unit at Killearn, which is staffed in association with the University and the Western Infirmary; the unit of thoracic surgery at Hairmyres and the unit for plastic surgery at Ballochmyle. It may be expected that in the future these hospitals may provide accommodation for other similar units, for example units for rheumatism and digestive disorders.

16. **Independent Specialised Hospitals.** This group includes the Glasgow Hospitals for Diseases of the Eye, the Ear, Nose and Throat, the Samaritan Hospital (Gynaecology), and the Cancer Hospital. Outside Glasgow there are two small eye infirmaries and a hospital for ear, nose, and throat. All these hospitals are small units and thus suffer disadvantages which we have already detailed. With one or two exceptions they are housed in old buildings.

17. **General Hospitals for Children.** The Royal Hospital for Sick Children in Glasgow provides the only example of a complete Children's Hospital in the Western Region. Stobhill has a separate children's block. There are wards for children in some of the district hospitals and a few small units attached to local child welfare units. On the whole, however, accommodation in this category is gravely deficient throughout the region. There is practically no accommodation for children in country hospitals outside Glasgow.

18. **Maternity Hospitals.** In Glasgow the principal accommodation in this category is in the Royal Maternity Hospital and in the maternity sections at Stobhill, the Southern General and Corporation District Hospitals. Stobhill is a good example of adaptation of existing buildings. Outside Glasgow there is excellent accommodation for maternity at the

new Ayr Central Hospital, and there are several very good modern units, notably at Kilmarnock, Greenock, Motherwell, and Johnstone, and in Stirling and Falkirk Infirmaries. Apart from these, maternity accommodation is mainly in old or adapted buildings. In Dumfries a poor law institution has been converted for maternity, and should prove satisfactory until a new hospital can be built. Many of the smaller maternity units are in converted private houses, which can never be quite satisfactory.

19. **Hospitals for Infectious Diseases.** In Glasgow there are three large infectious diseases hospitals and a fourth is under construction. Of the existing three, only one can be regarded as satisfactory in design and construction according to modern standards. Outside Glasgow there are many infectious diseases hospitals, but only Ayrshire Central Hospital and Paisley Hospital are new and of modern design. Nearly all the others are small and out of date as regards both structure and function. Many of these smaller units should be eliminated and the work centralised in larger units which should be adjacent to or form part of a district general hospital. Only thus can a complete service be assured.

20. **Hospitals for Tuberculosis and Chest Diseases.** The accommodation in this category includes various small hospitals or sanatoria and the sanatorium wards of some of the infectious diseases hospitals. With very few exceptions the accommodation is poor. The introduction of active surgical methods in treatment and the extended use of radiology in examination have rendered many of the smaller units obsolete. Further, in nearly all the units facilities for occupational therapy are lacking, and although in most cases the simple medical and nursing care is efficient it is not backed by measures to secure the best results from the psychological and social viewpoints. For these and other reasons we recommend that many of the smaller units should be discontinued and the work concentrated into larger units with access to full facilities.

21. **Poor Law Hospitals.** Nearly all the hospitals in this category are very old buildings with none of the facilities necessary for modern hospital work, and are unsuitable for the care of hospital patients of any kind. They may be required in the meantime as places for the care of the chronic sick and the aged and infirm, but they are unsatisfactory even for this purpose. With only one or two possible exceptions they should not be included in the future hospital service.

22. **Accommodation for Psychiatry.** Psychiatric treatment, and the care of patients suffering from early mental and functional disorders are in our view proper functions of the general hospital system. Hitherto this work has been little developed. Except in the Glasgow Corporation Hospitals there are no wards for psychiatry or mental observation in general hospitals, and there are only one or two clinics for out-patient care and follow-up work. This is an important omission which should have immediate attention.

23. **Accommodation for Nurses.** Living accommodation for nursing staffs must receive careful consideration. On account of recent alterations in the conditions of nursing service, with the introduction of the 96-hour fortnight, most hospitals will require additions to their nurses' homes. The reduction in hours of duty will in all probability mean an increase of 30 per cent. at the very least in the nursing staffs of most hospitals. In many of the hospitals the existing homes are somewhat crowded, and there are examples of recreation rooms having been converted to sleeping accommodation. It may in some cases be possible to obviate the necessity for extensive additions to nurses' homes by permitting nurses to live out of hospital, but we doubt if that would materially reduce the need for new building.

24. **Summary.** It is clear that for a comprehensive hospital service a long-term plan of expansion and rebuilding is necessary. This plan can be evolved and developed from the existing hospital centres and superimposed on such temporary adjustments as are necessary to make the fullest use of all the present facilities.

25. It should be emphasised that the full extent of the present deficiency of accommodation cannot be appreciated by consideration of the figures given for the existing beds in the region. A considerable reduction must be made to allow for adequate bed spacing, and in addition, as we shall show, the quality of the existing accommodation in many cases is highly unsatisfactory. Some improvement may be achieved in this respect by alterations and upgrading as a temporary expedient, and this should go on *pari passu* with new building. The following is a summary of the hospital accommodation in the region in 1944.

Sub-region.	General.	Maternity.	Infectious Disease.	Pulmonary Tuber-culosis.	Chronic Sick.
Glasgow	8,992	500	1,378	840	620
Renfrewshire, East .	255	75	299	286*	227
Renfrewshire, West .	304	28	124	—	94
Ayr County . . .	1,536	182	568	188	142
Lanarkshire . . .	3,421	168	679	536	188
Stirling and Clackmannan Counties .	977	45	304	181	145
Dumfries, Wigtown, and Kirkcudbright Counties . . .	361	66	250	132	102
Dunbarton County .	77	—	231	41†	78
Argyll	54	26	119	36	60
Bute	39‡	14	51	—	24
Totals . .	16,016	1,104	4,003	2,240	1,680

* Includes Bridge of Weir Sanatorium, 200 beds.
† In addition, Lanfine Hospital, 32 beds.
‡ Millport Hospital Group not included—*i.e.*, 484 beds mainly for non-pulmonary tuberculosis.

SPECIAL MEMORANDA

1. FACILITIES FOR THE TREATMENT OF CANCER IN THE WEST OF SCOTLAND

26. The following memorandum has been prepared in accordance with the request contained in the letter dated 21st October 1942 addressed to us by the Secretary to the Department of Health for Scotland. Its purpose, as defined in that letter, is " to provide the Department with an informed indication of the lines on which they should approach the Glasgow Hospitals with a view to securing some improvement in the arrangements for treating cancer."

27. Our report is based primarily on information gained in the course of our Hospital Survey. Some of the facts relating to the present arrangements for cancer treatment have been taken from data obtained by the Cancer Advisory Committee set up by the Department of Health in 1938, and we have to acknowledge our thanks to the Chairman (Mr W. J. Stuart) for permission to make use of this information. We have to acknowledge also our thanks to Dr Ralston Paterson of the Christie Hospital and Holt Radium Institute,

Manchester, and Dr R. M'Whirter of the Royal Infirmary, Edinburgh, who have given us valuable information regarding the Cancer Services in these areas.

28. Our report is in four sections. First we define the needs of a Cancer Service, secondly we describe the existing arrangements for the treatment of cancer in the West of Scotland, thirdly we give an estimate of the accommodation required in this region, and fourthly we submit our recommendations.

I. THE NEEDS OF A CANCER SERVICE

29. The aims of a Cancer Service have been described in a Memorandum of the National Radium Commission as follows :—

(1) To put before the public those facts about cancer which ought to be generally known.

(2) To secure the diagnosis of cancer at the earliest possible stage of the disease.

(3) To secure prompt and adequate treatment of every case.

(4) To improve established methods of treatment and devise new ones.

In making recommendations on the hospital organisation for such a Service we are not concerned with the first of these objects ("education") or the fourth ("research"). We shall confine ourselves to consideration of the hospital facilities required for the diagnosis and treatment of cancer, and for convenience we shall deal with the facilities required for treatment before those for diagnosis.

The need to link the Cancer Service with the General Hospital Service

30. We are of the opinion that the Cancer Service should be established in relation to the general hospitals rather than hospitals set aside exclusively for cancer, for the following reasons :—

(1) The treatment of cancer whether by surgery or radio-therapy demands full hospital facilities including modern X-ray diagnostic equipment, and pathological, bacteriological and biochemical services, which can only be provided (except at inordinate cost) in a large general hospital.

(2) The treatment of many types of cancer demands the expert services of specialists in various branches of Medicine and Surgery who are normally available on the staff of general hospitals.

(3) The diagnosis of cancer, which often simulates non-malignant diseases and requires similar methods of investigation, is carried out most readily in general hospitals.

(4) The recruitment of nurses is easier in a general hospital than a cancer hospital.

(5) The association with a general hospital avoids the stigma which inevitably attaches to a cancer hospital.

The need to co-ordinate the Cancer Services within the General Hospitals

31. In the treatment of cancer by radio-therapy the cost of apparatus, the need for a large staff of experts including physicists and trained technicians, and, in the case of radium, the importance of making full use of the active element, make it strongly advisable to concentrate most of the radio-therapeutic work of the region either in a single hospital or at any rate in a small number of hospitals.

32. In the treatment by surgery the need for such extreme centralisation is perhaps not established, but, since most operations for cancer are of a major character and should be performed by experienced surgeons working under the best conditions there are obvious advantages to be gained by some degree of concentration of the work.

33. We recognise the practical difficulty in translating these general principles into concrete recommendations, having regard to the number of hospitals in the West of Scotland at present admitting cases of cancer for treatment. We recognise moreover that, particularly for surgical treatment, to concentrate all types of case into a few main hospitals is not practicable and may not even be desirable. The important point, however, is that the organisation should be such as to ensure that those cancers best treated at the centre are in fact treated there. Such an organisation can, we believe, be achieved within the existing hospital framework by a scheme to regulate the transfer of patients, to co-ordinate the work of those engaged in the treatment, and to establish a unified records system.

The need for Diagnostic and Follow-up Facilities

34. While there are manifest advantages to be gained by centralising the treatment of cancer, it is clear that the position is quite different in regard to the provision of facilities for diagnosis and follow-up. Here on the contrary it is essential to reach out towards the patient, to provide consultative and follow-up centres close at hand to which he may be encouraged to apply as early as possible after the onset of symptoms.

35. Since the symptoms of cancer often simulate those of non-malignant diseases, and since the methods of investigation are identical, it is clear that the consultation centres should not be special " cancer clinics," but should be associated with ordinary surgical consultation clinics, and wherever possible should be located in or in relation to the district or local hospitals.

36. Though the keynote of the diagnostic and follow-up services must thus be decentralisation in the geographic sense, there must be a very close liaison between the staffs of the diagnostic clinics and those of the central treatment units to maintain efficiency as well as to ensure full continuity in the care of patients. To achieve this it would be necessary for members of the staff of the central treatment units to attend the consultative sessions of the diagnostic clinics at regular intervals, and the follow-up work should also be carried out in close co-operation with the staffs of the local hospitals.

Teaching

37. In surveying the needs of a Cancer Service for the West of Scotland we have kept in mind the requirements for the training of medical students and nurses. For students the training from the standpoint of cancer should be directed mainly to diagnosis. The student should be taught when to suspect cancer, what special investigations to carry out and how to reach a final diagnosis. These things can be taught most effectively in the diagnostic clinics, and we recommend that these clinics should be associated with the ordinary surgical out-patient clinics, particularly in the teaching hospitals.

II. EXISTING FACILITIES FOR THE TREATMENT OF CANCER IN THE WEST OF SCOTLAND

38. By the courtesy of the Chairman (Mr W. J. Stuart) we have been given access to figures relative to the treatment of cancer obtained by the Cancer Advisory Committee set up by the Department of Health in 1938. These figures are given in Tables I and II.

TABLE I

CANCER PATIENTS TREATED IN HOSPITALS OFFERING FACILITIES FOR SURGERY AND RADIO-THERAPY

Hospital.	Cancer In-Patients.		Number given "Specific Treatment."	Number given "No Specific Treatment."	X-ray Therapy available.	Radium Therapy Amount of Radium in custody of hospital.
	Total.	New Cases.				
Glasgow Royal Infirmary .	734	634	512	222	Yes	1077 mgm.
Western Infirmary, Glasgow	841	670	346	495	Yes	4602* ,,
Victoria Infirmary, Glasgow	430	326	307	123	Yes	175·5 ,,
Stobhill Hospital, Glasgow	342	283	75	267	Yes	107·8 ,,
Southern General Hospital Glasgow	204	184	49	155	Yes	
Royal Cancer Hospital, Glasgow	548	386	392	156	Yes	1300 ,,
Royal Samaritan Hospital, Glasgow	164	157	145	19	Yes	97 ,,
Royal Alexandra Infirmary, Paisley	85	80	56	29	Yes	145 ,,
Falkirk Royal Infirmary .	114	98	66	48	No	20 ,,
Stirling Royal Infirmary .	39	38	11	28	No	40 ,,
Totals	3501	2856	1959	1542		

* Amount of Radium in custody of Western Infirmary, Glasgow, has now been raised to 6602 mgm.

TABLE II

CANCER PATIENTS TREATED IN HOSPITALS NOT INCLUDED IN TABLE I.

Hospital.	Total Cancer In-Patients.	Number given "Specific Treatment" (*i.e.*, surgical op.)	Number given "No Specific Treatment."
Greenock Royal Infirmary	52	17	35
Kilmarnock Royal Infirmary	42	11	31
Dumfries and Galloway Royal Infirmary .	71	19	52
Royal Hospital for Sick Children, Glasgow .	26	10	16
Ear, Nose and Throat Hospital, Glasgow .	22	21	1
Glasgow Eye Infirmary	3	2	1
Eastern District Hospital, Glasgow . . .	50	12	38
Western District Hospital, Glasgow . . .	63	7	56
Broadstone Jubilee Hospital, Port Glasgow	22	15	7
Municipal General Hospital, Paisley . . .	25	5	20
County Hospital, Cleland	3	0	3
Airbles Hospital, Motherwell	13	0	13
Hamilton Home	7	0	7
Orchard House, Stirling	9	0	9
Rosevale House, Dumfries	1	0	1
Kyle Home, Ayr	2	0	2
Victoria Infirmary, Helensburgh	0	0	0
West Highland Cottage, Oban	12	9	3
West Highland Rest, Oban	2	0	2
Witchburn Hospital, Campbeltown . . .	0	0	0
Victoria Hospital, Rothesay	3	2	1
Isle of Arran War Memorial Hospital . .	3	1	2
Lady Margaret Hospital, Millport . . .	0	0	0
Wigtownshire Home, Stranraer	0	0	0
Clackmannan County Hospital	14	12	2
The Alexander Hospital, Coatbridge . .	2	0	2
Smithston Institution, Greenock	13	0	13
Totals	460	143	317

Table I refers to ten hospitals in the West of Scotland offering facilities for surgery and radio-therapy and shows in each case the number of in-patients suffering from cancer, the number given " specific treatment " (by surgery or radio-therapy or a combination of the two) and the number given " no specific treatment." The existence of facilities for X-ray treatment and the amount of radium available in each hospital are also shown.

Table II refers to 27 hospitals (not included in Table I) in which facilities for the treatment of cancer are less complete. The list includes small district and cottage hospitals, certain special hospitals and poor law institutions. The total number of cancer in-patients is shown, with the number given " specific treatment " (which here implies surgical operation) and the number given " no specific treatment."

It should be noted that while the figures relating to the individual hospitals are doubtless accurate it would be unwise to attach much significance to the sum totals, owing to the frequency with which cancer patients are referred from one institution to another at different stages in their treatment. It should be noted also that unless otherwise stated the figures include both new and return cases.

Facilities for Surgical Treatment

39. Surgical treatment for cancer is carried out mainly in the Glasgow hospitals and particularly in the three main voluntary hospitals, the Royal Infirmary, Western Infirmary, and Victoria Infirmary.

TABLE III

CANCER PATIENTS TREATED BY SURGERY IN THE MAIN GLASGOW HOSPITALS (1938)

Hospital.	Number of Patients treated by Surgery Alone.
Royal Infirmary	178
Western Infirmary	275
Victoria Infirmary	166
Stobhill Hospital	34
Southern General Hospital	43
Royal Cancer Hospital	88
Royal Samaritan Hospital	30

Table III gives the numbers of patients treated in the main Glasgow hospitals in 1938. It should be noted that the figures refer to treatment by surgery alone and do not include the considerable number of patients treated by surgery in combination with radio-therapy. It should be noted also that the figures include both new cases and return cases.

Facilities for X-ray Treatment

TABLE IV

X-RAY TREATMENT

Hospital.	Number of Cases Treated (1938).		
	In-patients.	Out-patients.	Total.
Royal Infirmary	144	234	378
Western Infirmary	156	247	403
Victoria Infirmary	100	235	336
Stobhill Hospital	67	46	113
Southern General Hospital	10	0	10
Royal Cancer Hospital	100	3	103
Royal Samaritan Hospital	88	29	117
Royal Alexandra Infirmary, Paisley	13	37	50

40. Equipment for X-ray therapy is available in the hospitals named in Table IV, which also shows the number of cases treated (1938).

Facilities for Radium Treatment

TABLE V

RADIUM TREATMENT

Hospital.	Radium Available.	Number of Cancer Cases Treated.
Royal Infirmary	1077 mgm.	189
Western Infirmary	*4602 ,,	268
Victoria Infirmary	175·5 ,,	55
Stobhill Hospital	107·8 ,,	38
Southern General Hospital		2
Royal Cancer Hospital	1300 ,,	201
Royal Alexandra Infirmary, Paisley	145 ,,	5

* The amount of Radium in the custody of the Western Infirmary has now been raised to 6602 mgm.

41. Radium is available in the hospitals named in Table V, which also gives details of the amount of radium available and of the number of cases treated in 1938.

III. ACCOMMODATION REQUIRED FOR CANCER TREATMENT IN THE WEST OF SCOTLAND

(a) Number of patients requiring treatment in a Cancer Service

42. The Registrar General's returns show that deaths from cancer in the West of Scotland Region in 1938 totalled 4343. Allowing for cured cases, the total annual incidence may therefore be estimated in round figures at 5000.

Mackenzie has shown that under present arrangements only about 27 per cent. of all patients suffering from cancer receive effective treatment, *i.e.*, treatment directed towards the cure of the disease, but to this must be added the considerable number of patients who receive palliative treatment; and it cannot be doubted that under an improved organisation the numbers in both categories would be augmented. Paterson, on the basis of his experience at the Radium Institute, Manchester, has stated: "It is probably safe to estimate that we shall not overstate the needs for the first 5 to 10 years of improved organisation if we take twice his (Mackenzie's) percentages as our indicator" (with the obvious exception of those few types of cancer of which more than 50 per cent. of cases already receive treatment). Working on this basis, Paterson gives estimates for the number of patients likely to require treatment as shown in Table VI.

TABLE VI

Estimated Number of Patients requiring Treatment for Cancer	
Total new cases per annum	5000
Untreatable from first diagnosis	2250
Lengthy investigation but not treated	500
Maximum number requiring active treatment	2250

It should be noted that these estimates refer to new cancer cases. A Cancer Service must, however, also provide for return cases. From the data given in Table I it would seem that the number of return cases requiring active treat-

ment is about 23 per cent. of the new cases. In addition, a Cancer Service must expect to handle a considerable number of non-malignant cases, either because cancer is suspected or because the disease though known to be non-malignant can be treated most effectively in a Cancer Unit. In view of these considerations it would seem reasonable to assess the annual number of cases requiring active treatment in a Cancer Service at well over 3000.

(b) Number of patients requiring Surgical and Radiological Treatment respectively

43. At the present time nearly all cancers of the gastro-intestinal tract are treated exclusively by surgical operation while most cancers of the uterus and of the tongue, mouth, and skin are treated exclusively (so far as the primary growth is concerned) by irradiation. A large proportion of cancers in other situations are treated by either method (according to the extent or special characters of the disease) or by the two methods in conjunction.

TABLE VII

Number of Patients requiring Surgical and Radiological Treatment in the West of Scotland. (After Paterson.)

Total number of new patients requiring treatment for cancer .	2250
Number requiring surgical treatment (either alone or preceded or followed by radio-therapy)	1500
Number requiring radiological treatment (either alone or preceded or followed by surgery)	1500

44. No exact assessment can be given of the numbers of patients requiring one or other method of treatment; as a rough approximation we present the figures given in Table VII, based on the estimates reached by Paterson on his experience at the Radium Institute, Manchester.

(c) Number of Beds required in a Cancer Service

45. Accommodation for cases of cancer falls into three categories:—

(1) For radio-therapy.
(2) For surgical treatment.
(3) For the nursing care of incurable cases.

46. (1) *Radio-therapy.* Data collected by the Cancer Advisory Committee of the Department of Health in 1938 showed that in the main Glasgow hospitals the average length of stay in hospital by patients undergoing X-ray treatment was from 25 to 30 days. At the present time fully 50 per cent. of patients undergoing radio-therapy are treated as out-patients but this is often not satisfactory, and we may assume that in a fully organised service the proportion will be lower. If we assume that of our estimated total of 1500 new cancer cases about 1000 will require treatment as in-patients, the beds required for radio-therapy in the West of Scotland would be approximately 80. In addition, however, beds would be required for recurring cases, for cases of rodent ulcer, and for other non-malignant conditions that can be treated most effectively in a Cancer Service. On information obtained from the Western Infirmary, Glasgow, it would appear to us that for this last category alone approximately additional 50 per cent. accommodation might be required. In view of these considerations it would seem that the total accommodation for radio-therapy could be assessed at not less than 150 beds.

47. (2) *Surgical Treatment.* It may be assumed that the average length of stay in hospital for cases undergoing surgical treatment is not less than 5 weeks. On our estimated total of 1500 new cancer cases per annum the accommodation

required for surgical treatment would thus be 150 beds. To this, however, must be added accommodation for cases suspected of cancer and requiring surgical investigations, including in some cases exploratory operation. It appears reasonable to assume that an additional 50 beds at least would be required for this purpose, making a total of 200 beds.

48. (3) *Nursing Care of Incurable Cases.* The hospital accommodation required in this category must depend upon a variety of circumstances including the general policy of the region in regard to hospital care of incurables, and we do not think it possible to give even an approximate estimate of the number of beds required. We assume, however, that such cases would not be treated in any special cancer units that may be set up but in the general beds reserved for the incurable sick, and in view of this, assessment of the accommodation required seems to be unnecessary.

IV. RECOMMENDATIONS

(1) Organisation

49. We assume that the Cancer Service will be under the control of a Cancer Committee of a Regional Council. Under this Committee there should be appointed a Director who should be a man actively engaged either as Surgeon or Radio-therapist in the treatment of cancer. His duties would consist in co-ordinating the work of the diagnostic clinics and treatment centres, in developing a unified scheme of record keeping and follow-up, and in organising measures for the dissemination of knowledge regarding the early symptoms of cancer.

(2) Radio-therapy

50. At the present time in the West of Scotland treatment by radium is generally carried out by radium therapists, whereas treatment by X-rays both in these and in other hospitals is carried out by radiologists in charge of the X-ray diagnostic departments. It is however generally agreed that radium therapy and X-ray therapy which are closely related, being in fact two methods of applying the same type of irradiation, should be combined, and should not necessarily be linked up with the X-ray diagnostic department. We therefore recommend that in the future service the radio-therapist should control treatment by both radium and X-rays.

51. We have already indicated the advisability of concentrating much of the radio-therapeutic work of the region either in a single large unit or at any rate in a small number of major units. In the course of our survey we have visited the Christie Hospital and Holt Radium Institute, Manchester, and the Radio-therapeutic Department of the Royal Infirmary, Edinburgh, and in both these centres we have been impressed by the evidence put to us in regard to the advantages of establishing a single radio-therapy centre for a region. Such a single unit has the advantages of economy in apparatus and staff and efficiency of working.

52. We recognise, however, that there are both difficulties and disadvantages in such an arrangement. The treatment of many types of cancer demands the close co-operation of radio-therapists and surgeons, collaborating in day to day work in the wards and out-patient department. In Glasgow, where the surgical treatment is necessarily carried out in more than one hospital, to establish a single radio-therapy centre would make such co-operation practically impossible.

53. We have accordingly given consideration also to an alternative plan by which radio-therapy departments in a small number of the major hospitals might co-operate as a single functional unit. In such a scheme it would seem reasonable to include the Glasgow Royal Infirmary and the Western Infirmary, which are already recognised by the Radium Commission as radium treatment

centres, and Stobhill Hospital which at present is well equipped for X-ray therapy. The Cancer Hospital, which is too small to be an effective unit, might be linked with the Royal Infirmary, with which it already has a close clinical association.

54. A scheme of this sort would involve the combination of the staffs of the three units under a single head and would necessitate arrangements for the ready transfer of patients from one unit to another according to their particular needs, so that the special facilities offered by each could be utilised to the full. We appreciate that such a scheme would be less easy to work than a single large unit. It would be necessary for each of the three hospitals to provide sufficient accommodation for both in-patients and out-patients, and a certain amount of triplication of apparatus would be unavoidable. We believe, however, that with proper co-operation the Service would not suffer in respect of efficiency in the treatment of the patients, and as a compromise it might meet with more ready acceptance than a scheme for a single radio-therapy centre.

(3) Surgical Treatment

55. We have already noted that since most operations for cancer are of a major character they should be performed by experienced surgeons working under the best conditions; and that while it is not desirable to aim at complete centralisation for all cases certain hospitals should be recognised as cancer centres and the organisation should be such as to ensure that cases requiring treatment at these centres should in fact be treated there.

We do not think it necessary to give specific recommendations as to the hospitals that should be recognised as such centres. At the present time the main Glasgow teaching hospitals can alone be regarded as suitable, but since the question relates to expertness of the surgical and nursing staffs rather than to accommodation and equipment it may well happen that in the future other hospitals will qualify for recognition.

With the key hospitals the surgical service should be so organised as to secure specialist treatment for every cancer case. Since cancers in different parts of the body require different methods of technique in treatment—methods which are often identical with or closely similar to those required for allied non-malignant conditions—the treatment should not be delegated to " cancer specialists " but to surgeons with specialist experience of the particular region or organ involved.

Thus cancers of the bladder should be treated by a team of urologists, cancers of the stomach by a team of surgeons with special experience of gastric surgery. Similarly cancers of the tongue, lip, and mouth (for which surgery and/or radio-therapy may be required) should be delegated to one surgical team in co-operation with a radio-therapist.

It should be the aim of the cancer organisation to develop such " regional specialisation " as far as is reasonably practicable. We recommend that reorganisation on these lines should be required of a hospital seeking recognition as a cancer centre.

(4) Clinics for Diagnosis and Follow-up

56. As we have already indicated, consultation and follow-up clinics should be related to the ordinary surgical out-patient clinics. We recommend that for this purpose agreement should be reached with all the district hospitals in the West of Scotland and with certain cottage hospitals in isolated parts of the region.

2. ISOLATION HOSPITALS

57. The earliest method of dealing with epidemic disease from a public standpoint was an extension of the quarantine system. Every infected house became a prison for its inmates until all had died or recovered. Contacts as

well as patients were sacrificed in order to protect the community. This harsh and futile system was finally disposed of by Dr Richard Mead in the first quarter of the eighteenth century. Mead advised that the sick should be "lodged in clean and airy habitations," and that all the expenses of treatment should be paid by the public. It was not until the close of the century, however, that the first step towards the establishment of permanent fever hospitals was taken. The earlier hospitals fell into disrepute, largely because of the high death rate among medical and nursing attendants; and in many areas it became the practice to admit fever cases to general hospitals.

58. During the first half of the nineteenth century the need for fever hospitals received scant recognition from the legislature, and, apart from the general hospitals, the workhouse infirmaries remained the only places of reception for infected persons who were badly housed. From time to time "cholera hospitals" were put up in panic when the disease was rife, only to be taken down again when the immediate danger had passed. Throughout the nineteenth century the whole emphasis was laid on isolation as the function of the fever hospital, and treatment was hardly mentioned. Even as late as 1900 the Local Government Board issued a Memorandum which contains the following passage: "An isolation hospital being intended primarily for the protection of the public at large rather than for the benefit of individuals . . ."

59. The twentieth century opened with a revolution in preventive medicine. The protection of the community through sanitary measures was still pursued with vigour, but increasing attention was given to the care of the individual. The fever hospitals established in the great towns were consciously developed as institutions for providing highly skilled medical and nursing care; the scope of treatment has been progressively broadened to deal with a great variety of communicable diseases, including pneumonia, complicated cases of measles, and whooping-cough, and infections involving the central nervous system. It is fully recognised in these institutions that their function is identical with that of any other hospital—to provide for its patients the most efficient treatment which modern science can call to its aid.

60. In sharp contrast with this development the fever hospitals in small towns and rural areas commonly retain all the faults of the old isolation hospital. They are now obsolete. For this reason alone the time has come to abandon these small and uneconomic institutions and centralise the hospital treatment of infectious disease in larger units. Moreover, the striking advance in transport services has made it possible to bring patients in safety and comfort over relatively long distances, with the result that a single hospital can now serve a wide area.

61. In the large cities it is customary to provide separate hospitals for the treatment of infectious disease, partly because the number of beds required makes a satisfactory administrative unit, and partly because the general hospitals are not as a rule favourably situated for the care of infectious patients. The disadvantage of such a system is that it tends to isolate the staff of the fever hospital, who lose much by want of contact with general medicine and surgery, and especially paediatrics. In the less densely populated areas, such as all the sub-regions in the Western Region with the exception of Glasgow, there is a very strong case for combining fever hospital units with general hospitals. This combination provides a substantial administrative unit for all hospital purposes, and it should be possible by this means to secure the services of experienced clinicians, and to offer opportunities for experience in a wide range of medicine to both doctors and nurses. A combined hospital would provide an admirable training ground for younger men and women who wished to reach consultant rank, and it would raise the status of general medicine in the district hospitals.

62. The principles underlying a scheme for the treatment of infectious disease may now be summarised :—

(1) The hospital should be centrally situated and reasonably accessible to the district which it serves. Generally speaking, the most convenient situation is within easy reach of a large town ; for under these conditions a public water supply and a good system of sewage disposal are available, and gas and electricity are within easy reach. Medical attendance by visiting consultants can be secured readily, and resident medical and nursing staff are not cut off from urban social life and recreational facilities. Supplies can be obtained quickly, and rapid communications lighten anxiety in cases of emergency.

Our ideas regarding accessibility have undergone a complete transformation since the beginning of the century. Modern improvements in transport have enormously increased the permissible width of a hospital area, and a journey of twenty or thirty miles to-day involves no more risk and much less discomfort than a four mile journey forty years ago.

(2) The hospital should be combined, wherever possible, with the general hospital serving the district, forming a separate wing of the institution but enjoying in common the administrative and many of the clinical services.

(3) The ward buildings for fever cases should be constructed of " semi-permanent " materials. The older rural fever hospitals erred on the side of cheapness and poor construction ; and, as Sir Richard Thorne observed, " people did not dread scarlatina enough to let their relatives and children be taken away to a tarred shed of repulsive aspect." In towns, on the other hand, and in some rural districts, the very permanence of the buildings has been instrumental in preventing progress. The modern structure should be strong enough to permit adequate heating and good sanitary services, but not so massive as to interfere with easy alteration and extension.

(4) There should be adequate bed space for each patient. The dimensions laid down long ago for wards of several beds—12 feet of wall space, 144 square feet of floor space, and, as nearly as possible 2000 cubic feet per bed—are supported by experience ; and the most important of these measurements is the 12 feet of wall space. In cubicle wards, which are indispensable in a good fever hospital, the risk of cross-infection is minimised, and it is generally considered sufficient to have 10 feet by 12 feet of floor space. This is ample for a single patient, but many authorities find it more convenient to construct cubicle wards on a two-bed standard with a floor space of 160 square feet. This allows the cubicle to be used economically for one or two patients, as occasion requires.

(5) The fever unit must have facilities for treating a variety of diseases. The term " infectious disease " no longer denotes merely scarlet fever, diphtheria, and the enteric group. Indeed the wide range of streptococcal infections alone demands great flexibility in isolation arrangements. In addition, the function of the modern unit is to treat all serious illnesses that are transmissible from person to person, and reference has already been made to the importance of admitting complicated cases of such diseases as measles, whooping-cough, influenza, pneumonia, and acute diseases of the central nervous system.

3. MENTAL HEALTH

63. The subject of mental hospitals lies outside our remit, and, at the other end of the mental health services, we are not directly concerned with the organisation of clinics apart from hospitals. Assuming, however, that the hospital services of this country will be developed on a regional and sub-regional basis, we feel that we ought to take account of the mental health services in association with general hospitals. In point of fact our material

is very scanty because outside Glasgow there is hardly any provision of either clinics or beds for the treatment of mental illness. The only exception is a small psychiatric clinic recently organised at Kilmarnock Infirmary. The Dumfries and Galloway Royal Infirmary has a working arrangement with the Crichton Royal Mental Hospital. In other areas there are arrangements for consultation at general hospitals, usually with the Medical Superintendent of the nearest mental hospital. Broadly speaking, however, the contribution of the district general hospitals in the Western Region to psychiatric services is negligible.

64. In Glasgow the mental health services are more fully developed. Stobhill Hospital, in addition to its psychiatric unit of about 300 beds, has a staff of psychiatrists who hold out-patient clinics. The accommodation for out-patients falls short of a desirable standard. The Southern General Hospital has 128 beds for mental "observation" patients. This psychiatric unit is under the charge of a visiting psychiatrist who is also Superintendent of one of the Corporation's Mental hospitals. There is a considerable amount of out-patient work, but the premises are inadequate. A health visitor is employed in follow-up work for the department.

65. Psychiatric clinics are also held at the Western Infirmary, where there is the nucleus of a teaching department, but the arrangements at the Royal and Victoria Infirmaries are less fully developed.

66. In the observations which follow we are concerned only with psychiatric services in relation to general hospitals. We therefore make no reference to the work of mental hospitals and their clinics or the education services and any arrangements made for child guidance. It is clear, however, that no psychiatric service could be complete unless the mental hospitals are brought into close working relations with the general hospitals, on the principle that "the treatment of mental disorder should approximate as nearly to the treatment of physical ailments as is consistent with the special safeguards which are indispensable when the liberty of the subject is infringed; that certification should be the last resort and not a necessary preliminary to treatment."

67. The general hospitals are specially concerned with the care of persons suffering from the psycho-neuroses, but one of the main functions of the psychiatric clinic in a general hospital is diagnosis. In order that patients may be differentiated and referred for proper treatment, there must be some place to which they can be sent for preliminary investigation. General medical practitioners are responsible for the reference of nearly three quarters of the patients who attend psychiatric clinics, and many of them are averse from sending a patient direct to a clinic which is set apart for the treatment of mental conditions. A diagnostic clinic should therefore have facilities for investigating the whole range of disease, physical and mental, and it should not give rise to a feeling in the mind of the patient that he is labelled as a mental case. On these grounds the only logical conclusion one may reach is that the normal situation for a diagnostic clinic is the out-patient department of a general hospital.

68. When the patient's condition has been diagnosed, there are several possible references for treatment, of which the following are the most important:

(1) To the general practitioner for domiciliary treatment.

(2) To the wards of the general hospital for out-patient or in-patient treatment under the care of a physician, surgeon, neurologist, etc., as the case may require.

(3) To the mental hospital for in-patient treatment, either voluntary or under certificate.

(4) To the psychiatric clinic for out-patient treatment.

(5) To the psychiatric department of the general hospital for in-patient observation.

69. If this brief summary of the functions of the diagnostic clinic at a general hospital is accepted, it follows that both central and district hospitals should have psychiatric departments. In the former the departments would be large, and some of them would provide facilities for teaching medical students, post-graduates, nurses, and psychiatric social workers. The associated wards would serve for the treatment of psycho-neurotic patients, and also for observation cases until a diagnosis was established. The principal activities, however, would be in the out-patient department, where special facilities for teaching would be provided. The organisation of a social service would be an important part of the scheme, and opportunities would be offered for research. In the district hospitals the arrangements would be simpler. In some it might be necessary to provide a few beds for observation cases, but in all the out-patient department would be the foundation of the service.

70. It is recommended that services for children should be part of the education scheme, and that child guidance should be undertaken in connection with the schools. Cases of special difficulty should be referred to the psychiatric clinic at the general hospital, where special sessions for children would be held as required.

71. The greatest defect in the psychiatric services at general hospitals is the lack of trained staff: psychiatrists, psycho-therapists, and social workers. Unsuitable accommodation, overcrowding of out-patient departments, and lack of time for careful investigation are other hindrances to efficiency.

72. Summary: we have come to the conclusion that the best situation for a psychiatric clinic is a building at a general hospital. The clinic should have a close liaison with both the general and the mental hospital, drawing upon the services of both according to its needs. It should have a call upon beds in both types of hospital, the former especially for observation cases and for patients who are fearful of "mental hospital" associations. If possible, the in-patient beds should be in the same building as the clinic, thus forming a wing of the general hospital. This arrangement would be in line with the other special departments which we have already recommended for general hospitals, such as maternity, fevers, chest diseases, and orthopaedics.

4. ORTHOPAEDIC SERVICES

73. In this Report we shall interpret the term "Orthopaedics" as applying to all forms of crippledom in children and adults, resulting from deformities, injury, or disease. Defined thus, it includes the following:—

(1) Congenital and acquired deformities and paralyses.

(2) Injuries and their sequelae (excluding injuries to the head and viscera).

(3) Diseases of bones and joints and related structures (including tuberculosis of bones and joints).

74. In interpreting "Orthopaedics" so widely we do not imply that all cases coming within this comprehensive definition must necessarily be treated in an orthopaedic service. Some such cases come within the scope of general medicine or surgery, some are treated most conveniently in the general wards of a children's hospital, while others (notably bone and joint tuberculosis with an open focus) require special provision. Fortunately from the standpoint of this Survey the precise scope of an orthopaedic service is not important. There is general agreement as to the need for such a service and as to its general plan and organisation; the range of its work may be determined by experience.

The Components of an Orthopaedic Service

75. Though the needs vary somewhat according to local conditions, in general terms it may be said that the principal components of an orthopaedic service are :—

(1) An orthopaedic department of a central hospital. This unit should include a small number of beds for short-term cases and for patients unfit for transport, but its main elements are the out-patient casualty department and the consultative clinic.

(2) The orthopaedic section of a country general hospital. This should act as the main centre for major orthopaedic work and for the continued care of long-term cases, both adults and children. It would necessarily be provided with full educational facilities and with facilities for physio-therapy and recreation.

(3) Out-patient clinics. These clinics would be utilised for the treatment of patients not requiring hospital care, for the continued treatment of patients discharged from hospital, and for consultative and follow-up work. One such clinic would be located at the " central " hospital ; others might be at district hospitals and yet others in suitable premises at selected points in the more populous areas.

(4) A " reconditioning " centre. The function of this centre would be to provide for the first stage of post-hospital rehabilitation, that is, for the restoration to physical fitness of patients no longer requiring hospital treatment. Such a centre would be used mainly for those disabled by injury and would be of especial value to expedite the return of injured men to work. The facilities that would be required are discussed in the section on Rehabilitation. In some areas the requirements might be met most satisfactorily by an out-patient centre, preferably located near the centre of population ; in other areas and for certain types of disablement a residential centre might be more suitable.

Existing Arrangements for Orthopaedic Work in the West of Scotland

76. (1) *The Corporation of Glasgow.* The orthopaedic service provided by the Corporation of Glasgow has necessarily been restricted to those patients for whom the local authority has statutory responsibility. In practice this means the treatment of tuberculosis of bones and joints and a proportion of cases of crippledom in children. Under peace-time conditions accommodation for the orthopaedic affections of children is provided at Mearnskirk Hospital, while adults with tuberculosis of bones and joints are treated at Robroyston Hospital. Out-patient services are provided at the clinic at Ashley Street and a number of sub-clinics.

(2) *The Royal Hospital for Sick Children.* Orthopaedics bulks largely in the general surgical work of this hospital, and accommodation for cases requiring long-term treatment is provided at the country branch at Drumchapel.

(3) *The Main Glasgow Voluntary Hospitals.* At these hospitals the orthopaedic work is confined to adults and deals mainly with injuries and their sequelae and non-tuberculous affections of bones and joints.

At the *Victoria Infirmary* the orthopaedic unit has a certain number of beds and an out-patient department including rooms for physio-therapy and a gymnasium. It deals with all fractures (in-patients as well as out-patients) and other orthopaedic cases. The *Philipshill Annexe* provides accommodation for long-term cases and is recognised as a hospital school. At the *Royal Infirmary* the orthopaedic unit has 12 beds and a large out-patient department including rooms for physio-therapy and a gymnasium. It provides for the out-patient treatment of fractures and for such other orthopaedic cases as are specially referred there. The Royal Infirmary has no country annexe devoted

to orthopaedics. At the *Western Infirmary* the orthopaedic unit has an out-patient department, but no beds. It provides for the treatment of all out-patient casualties and for such other orthopaedic cases as are specially referred there. The Western Infirmary has no country annexe, but at present all major orthopaedic cases and cases requiring long-term care are transferred to Killearn E.M.S. Hospital. By arrangement between the University, the Western Infirmary, and the Department of Health for Scotland, the orthopaedic departments of the two hospitals are under the charge of the University Lecturer in Orthopaedics.

(4) *Areas outwith Glasgow.* In these areas organised arrangements for orthopaedic work are limited, for the most part, to provision for tuberculosis of bones and joints, and even such provision is not uniformly satisfactory. In Lanarkshire, under peace-time conditions, Stonehouse Hospital is reserved for orthopaedics (predominantly tuberculosis). In Bute, ample accommodation is available at Millport. Other local authorities either make no special provision (other than the usual sanatorium accommodation) or send their cases on a customer basis to Glasgow, Stonehouse, or Millport. There are also three homes for crippled children—the East Park Homes at Glasgow and Largs (204 beds), the Biggart Memorial Home at Prestwick (140 beds), and the Strathblane Children's Home (40 beds).

Recommendations

77. The planning of an orthopaedic service for the West of Scotland is rendered complex by the wide range and diversity of present-day orthopaedic work and by the number of hospitals and authorities already making some provision for one or more of the various subdivisions of this specialty.

78. An ideal orthopaedic service would be comprehensive in scope, that is, it would provide within the framework of a single organisation for the care of both adults and children and for all types of crippling by deformity, injury or disease, whether statutorily the responsibility of the local authority or not. But in view of the considerations set forth above it is clear that such a scheme would be quite impracticable at the present time. A further difficulty arises from the fact that the orthopaedic services of the West of Scotland cannot be fitted into the sub-regional framework on which our general hospital recommendations have been based; for on the one hand in the Central (Glasgow) Sub-region the size of the population and the hospital situation make necessary the establishment of several orthopaedic services, while on the other hand the outlying sub-regions must necessarily rely to some extent, both as regards hospital accommodation and expert staff, on the facilities available only in Glasgow. With these considerations in mind, we recommend that the general plan for the orthopaedic services should be as follows :—

(1) In Glasgow for the orthopaedic disorders of childhood and those diseases for which the local authority has statutory responsibility the orthopaedic service should be based upon Mearnskirk Hospital as the " Country " hospital, working in close relationship with the Royal Hospital for Sick Children.

(2) For all other orthopaedic work within the region the orthopaedic services should be arranged on a sectoral plan, radiating from the three main Glasgow voluntary hospitals (but with special modifications for the Dumfriesshire Sub-region and perhaps for Stirlingshire).

79. According to this plan there would be three main sectors :—

(1) The Glasgow and Eastern Sector, including the whole Lanarkshire Sub-region, based upon the Royal Infirmary as the " Central " hospital and Hairmyres Hospital as the " Country " hospital.

(2) The Glasgow and South Western Sector, including Ayrshire and Renfrewshire, based upon the Victoria Infirmary as the " Central " hospital and the Philipshill Annexe (and possibly Ballochmyle E.M.S. Hospital) as the " Country " hospital.

(3) The Glasgow and Northern Sector, including Dunbartonshire, Argyll, and perhaps Stirlingshire, based upon the Western Infirmary as the " Central " hospital and Killearn Hospital as the " Country " hospital.

80. The Dumfriesshire and Stirlingshire Sub-regions require special consideration.

Dumfriesshire is, in our opinion, not sufficiently populous to support a complete orthopaedic service, while it is too remote from Glasgow to be completely dependent upon the sectoral organisation. Here the solution may be found in a compromise, by which the treatment of injuries and of minor orthopaedic conditions would remain within the province of the general surgeon, while major orthopaedic cases would be transferred to the sectoral organisation of the Victoria Infirmary.

In *Stirlingshire* the position is affected by war-time developments. In 1940 the Department of Health established an orthopaedic unit in the E.M.S. Hospital set up for war purposes at Larbert Mental Institution. The unit has since then been used widely for orthopaedic cases from the Stirling-Falkirk area, and co-operation has been obtained between the unit and the two main voluntary hospitals (the Royal Infirmaries at Stirling and Falkirk). The success of this development raises the question as to the possibility of maintaining a similar orthopaedic service for this area in peace time. But much of the success of the Larbert unit is due to its skilled personnel, and this personnel has been attracted to and retained at Larbert mainly on account of the large volume of major orthopaedic work carried out in this unit. In peace time the volume of major orthopaedic work available in the Stirling-Falkirk area is not large, and we doubt if it is sufficient to support a complete orthopaedic service. Here again, therefore, we are of the opinion that a compromise solution may prove satisfactory, in which the immediate treatment of injuries and minor orthopaedic work are performed locally, while major orthopaedic work is carried out in conjunction with the sectoral organisation at Killearn Hospital.

5. REHABILITATION

81. The term Rehabilitation is now commonly applied to two distinct processes or stages in the restoration of the sick or injured to fitness. The first stage has been called Medical Rehabilitation and is concerned with restoration to physical fitness ; the second has been called Post-hospital Rehabilitation and is concerned with restoration to social circumstances and industry. In this Survey we shall confine our attention to the first stage.

82. " Medical Rehabilitation " in its widest sense should denote all measures of treatment whether by drugs or surgical operation or physical methods. It is however now used to denote particularly the physical treatment that may be used ancillary to medical and surgical measures to expedite recovery. Such physical treatment is of value in promoting the general health and strength and in restoring muscle tone, the movements of joints, and similar functions.

83. *Physical Methods of Rehabilitation.* The methods of physical treatment in use at the present time may be classified as follows :—

(1) Passive physio-therapy, including massage, electrical stimulation, infra red irradiation, diathermy, ultra violet irradiation, and various types of baths.

(2) Drill and general exercises and games such as medicine ball, deck quoits, badminton, and swimming.

(3) Exercises and occupations specially selected to suit the individual case and designed to restore the functions of the affected part. In this category

come remedial exercises and occupational therapy. *Remedial exercises* may be performed with special apparatus such as stationary bicycles and rowing machines, or more simply by exercising against suitably arranged weights or springs. *Occupational therapy* attains the same end by engaging the patient in some form of occupation that will demand the use of those particular muscles and tendons and joints that require exercise. The occupations in common use range from basket making and similar light crafts to weaving, treadle-saw work, and carpentry, and to such heavy jobs as chain sawing and cement mixing.

84. *The Field for Medical Rehabilitation.* The facilities required for Rehabilitation will vary greatly according to the type of hospital and the type of case treated. Thus, the scope for Rehabilitation in hospitals for infectious diseases is limited and in hospitals for tuberculosis only the less vigorous types of physical treatment are indicated. For patients in the active phase of many forms of acute disease or, at the other extreme, for patients suffering from painful or progressive incurable disease there is no scope for Rehabilitation.

85. The greatest need for facilities for Rehabilitation is in the general hospitals. In these hospitals Rehabilitation facilities should be available for all suitable cases, which include many types of general medical and surgical patients. The principal category, both as regards their numbers and the extent to which they benefit from Rehabilitation, is the group including injuries, paralyses, and similar orthopaedic disorders. For this reason the Rehabilitation Service should be planned mainly in relation to orthopaedic work. Special arrangements for Rehabilitation are important also in maternity hospitals for post-natal reconditioning.

86. *Facilities required for Physical Rehabilitation.* From the point of view of accommodation, staffing and equipment the rehabilitation needs may be considered under two headings :—

(1) *The needs for bed-fast patients in hospital.* It is now well established that physical treatment should be started as soon as the nature of the injury or disease permits. In injuries particularly the treatment must often be started within a few days of the time of injury—and there is good reason to believe that the more thorough the early treatment the smaller will be the demand for rehabilitation facilities at a later stage. The importance of this early rehabilitation therefore needs no emphasis.

The facilities required for rehabilitation at this stage are very few. No special accommodation and practically no special equipment is needed, and in many hospitals there are sufficient physio-therapists who could be diverted to this work from less productive tasks.

87. (2) *The needs for ambulant patients (in- or out-patients).* At this stage the facilities required are much greater. While the need will vary according to the size and type of hospital, a complete Rehabilitation Centre on present-day standards may be expected to include the following accommodation :—

(i) A room for passive physio-therapy. At the present time most authorities do not rate the value of passive physio-therapy highly ; in consequence the space assigned for it need not be great.

(ii) Gymnasium.

(iii) A room for light occupations—looms, treadle saws and the like.

(iv) A shed or covered space for heavy occupations such as chain sawing and mortar mixing.

(v) Space for games and open-air exercises.

(vi) Accommodation for sprays and if possible a swim bath.

The staff required for such a centre might under present conditions include three types of worker, namely, masseuses (with the diploma C.S.M.M.G.), occupational therapists and physical training instructors. While it is in accordance with present practice we believe that this division of duties is unnecessary. In our opinion all the work described above would be within the competence of a masseuse who had had some additional training in the use of special occupations. There would clearly be many administrative advantages to be gained by such a change.

88. *Requirements for Physical Methods of Rehabilitation in the West of Scotland.* It is clearly practicable to set up only a limited number of Rehabilitation Centres in the West of Scotland. We are of opinion that in the first place such centres should be established in relation to the orthopaedic services and in hospitals in which the number of injured persons treated is sufficient to justify the cost. We therefore suggest that a beginning should be made by establishing centres as follows :—

(1) At the three Glasgow hospitals which treat large numbers of injured persons (Glasgow Royal Infirmary, Western Infirmary, Glasgow, and Victoria Infirmary, Glasgow). Each such centre should be available not only for in- and out-patients of that hospital but also for other patients residing within a convenient distance and able to attend for daily treatment.

(2) At the four country hospitals associated with the orthopaedic services (Mearnskirk, Hairmyres, Killearn, Philipshill). Each such centre should be available not only for patients of that hospital but also for other patients within the sector who for geographical or other reasons are unable to attend as out-patients at the appropriate city hospital. For such patients hostel accommodation should be provided either within the hospital or, preferably, in an adjacent country house.

(3) At other selected hospitals in the region where the type of work and number of cases are such as to justify the cost.

In this last group the extent to which Rehabilitation facilities should be provided will doubtless be determined by experience, and the situation and character of any centres that may be decided upon will be determined by the local circumstances. Thus, in Renfrewshire, Greenock would be an appropriate place for an out-patient centre. In Ayrshire a centre might be developed at Ballochmyle both for in-patients and for selected patients from Ayr and Kilmarnock. In Stirlingshire a similar centre might be developed at Falkirk Royal Infirmary.

6. MEDICAL STAFFS

Medical Staffs of Hospitals for Infectious Diseases and Tuberculosis

89. The staffing arrangements in these hospitals at the present time vary greatly throughout the region. In the larger hospitals the appointments are, almost without exception, on a whole-time basis. The usual plan includes a Physician-Superintendent who combines clinical with administrative duties and a varying number of assistants or house officers. In the smaller hospitals on the other hand, the work is done either by the medical officer of health and his assistants, as one of their many duties, or by local practitioners who attend the hospital when required.

90. The recommendations we make elsewhere in this Report will, if adopted, have the effect of eliminating most if not all of the smaller hospitals for infectious diseases and tuberculosis, and the question of their type of staffing in the future therefore does not arise.

91. In the larger hospitals we have surveyed, we have been impressed by the evidence put forward in regard to the disadvantages of the present system

of combining clinical with administrative duties. The clinical care of patients suffering from infectious diseases or tuberculosis requires a wide knowledge of clinical medicine, while the opportunities for clinical investigation and research are such as to demand the full-time services of clinicians freed from administrative ties. The treatment of infectious diseases and tuberculosis also offers a fruitful field for collaboration between clinicians and the various laboratory services—pathology, bacteriology, and biochemistry—and in the larger hospitals there appears to be a clear need for appointments of this character.

Medical Staffs of General Hospitals

92. From the standpoint of medical staffing we may consider the Voluntary hospitals and the Local Authority hospitals together, for in the West of Scotland the only general hospitals (other than Poor Law institutions) controlled by Local Authorities are those administered by the Corporation of Glasgow and in them the staffing arrangements do not differ greatly from those of the Voluntary hospitals in the region.

93. The present position is that appointments to the medical staffs of these hospitals are mainly on an honorary part-time basis; with few exceptions whole-time and salaried appointments are limited to interneships, laboratory services, and administrative posts.

94. Apart from a small number of joint arrangements, most of which relate to University teaching posts, the appointments are made by the individual Boards of Management and are made to the individual hospitals. It is not the general custom to advertise vacancies, and the usual practice is to restrict the field to those holding junior appointments in the hospital concerned. There are no arrangements for joint staffing of two or more hospitals and no arrangements for the transfer or promotion of members of the staff from one hospital to another. Nor are there, so far as we are aware, any limits set to the number of appointments in different hospitals that may be held concurrently by any individual.

95. In the main Glasgow hospitals nearly all the senior appointments and many of the junior appointments are held by men of the rank of specialists or consultants. In the general hospitals outwith Glasgow, on the other hand, much of the work, both medical and surgical, is performed by physicians in general practice. It is true that in most such hospitals visiting specialists or consultants are appointed but their conditions of service vary greatly. In some cases the consultant attends regularly on stated days once or even twice a week; in others his visits are less frequent and less regular. In some cases he acts strictly in a consultant capacity, *i.e.*, he advises on individual patients when requested to do so; in others he is in charge of beds and responsible for the continued care of his patients. Only rarely is he appointed to supervise and be responsible for the work of his less experienced colleagues.

96. We assume that in a hospital service organised on a regional basis there will be arrangements for the co-ordination of staff appointments throughout the region and that an increasing number of whole-time clinical appointments will be made.

97. In such a scheme it appears to us that the most important step to be taken in the near future is to reinforce the staffs of the district hospitals outwith Glasgow. This should be done by establishing in those hospitals part-time or whole-time salaried appointments, to be held by men of " teaching hospital " rank seconded from the Glasgow hospitals, who would reside in the district to which they were appointed for a term of years and devote themselves entirely to work in that district.

98. The extent to which such a service as this should be developed will depend to a large extent upon the character of the hospital service after the war, and we assume that the changes will be effected gradually as experience indicates. It appears to us that in the first place attention should be directed mainly to the appointment of general physicians and surgeons; but in the districts distant from Glasgow certain specialist appointments may also be needed.

99. The precise type of appointment needed will vary a good deal according to the particular district. In some districts it may be found satisfactory to make part-time salaried appointments, allowing opportunity for private consulting practice in the same district. In other places where the opportunities for remunerative consultant practice are few or non-existent the appointments should approximate to a whole-time basis.

100. In such a service close co-operation must be maintained between the central hospitals and the district hospitals, not only to promote efficiency and to facilitate the transfer of patients requiring specialised treatment at the centre, but also to maintain the association of the district staffs with the central teaching institutions. This could be achieved by appointing consultants from the central hospitals to visit each district with authority not only to act *qua* consultants but also to supervise and be responsible for the standard of the clinical work.

101. In the course of our Survey we have inquired into the arrangements for staff appointments to the district hospitals in the region, and such information as we have obtained will now be detailed, along with our recommendations for the future. It should be made clear that since the appointments vary greatly in character in different hospitals and are liable to be changed from time to time, and since moreover we have not sought to obtain precise information regarding terms of service, our review of the present state of staffing arrangements must be made in general terms. The suggestions which we make are minimal and must be reviewed in the light of experience.

102. **(1) Stirling and Clackmannan Sub-region**

Stirling Royal Infirmary. In 1938 the visiting medical staff numbered 14, of whom 4 were consultants or specialists from Glasgow or Edinburgh. Of the remainder, 6 were in general practice.

Falkirk Royal Infirmary. In 1938 the visiting medical staff numbered 18, of whom 8 were consultants or specialists from Glasgow, visiting once a week. Of the remainder, all except the Medical Superintendent were in general practice.

Clackmannan County Hospital. In 1938 the visiting medical staff numbered 3, of whom one was a Glasgow consultant visiting once a week. The others were in general practice. Since 1938 two other general practitioners have been appointed, one as surgeon and one as anaesthetist.

We are informed that since 1938 a certain amount of co-operation has been attained between these hospitals in regard to staffs. A radiologist attends all three hospitals and limits his work to the sub-region; a consultant physician and an oculist, both from Glasgow, attend two of the hospitals; three surgeons (two of whom are general practitioners) attend two of the hospitals.

We are of opinion that the work of this sub-region is such as to demand considerable reinforcing of the medical staffs. There is a need for at least one physician of consulting rank who would limit his work to the sub-region. On the surgical side at Falkirk the present arrangement is that the work is performed by general practitioners with a weekly visit by a Glasgow consultant. This is unsatisfactory. In a hospital serving a population of well over 100,000,

mainly industrial in character, the volume of work should be sufficient to demand the regular services of at least one trained surgeon, with an assistant surgeon who might be responsible mainly for the accident and fracture work of the hospital.

At Stirling the surgical work is performed mainly by a surgeon who lives in the district and this arrangement appears to be satisfactory. There is sufficient volume of work also for an assistant who would be responsible mainly for accident and fracture work.

At Alloa under a regional scheme the surgical work would be limited to emergency and minor cases and could well be put under the charge of a trained surgeon who could visit the hospital from Stirling.

There would appear to be a need also for a pathologist, who should be attached to both Stirling and Falkirk Infirmaries and be responsible for the laboratory services of the whole sub-region.

103. (2) West Renfrewshire Sub-region

Greenock Royal Infirmary. In 1938 the visiting medical staff numbered 14, of whom 4 were consultants or specialists from Glasgow, visiting once weekly or less frequently. All of the remainder were in general practice.

This hospital serves a population of over 117,000, mainly of industrial character. It admits general medical and surgical cases, including a large number of fractures and other injuries, and there is a busy out-patients casualty department. We are of the opinion that there is a clear need to reinforce the staff by the appointment of fully trained men. They should include a physician, who might be of the status of an assistant physician in a teaching hospital, and at least one surgeon * of similar status, supported by an assistant * who might be made responsible for the accident and fracture work of the hospital. There is a need also for a pathologist, who would be responsible for the laboratory services of the whole sub-region.

Broadstone Hospital, Port Glasgow. In this surgical hospital the work is under the direct control of, and except for minor procedures is all performed by a Glasgow surgeon of consultant rank who attends regularly and is also available for emergency work. Four general practitioners hold appointments as assistant surgeons.

We are of the opinion that these arrangements at the present time are satisfactory. In the future, however, when the surgical services of Greenock have been upgraded, it might prove more convenient for a fully qualified surgeon located at Greenock to be made responsible also for the work at Port Glasgow.

104. (3) East Renfrewshire Sub-region

Royal Alexandra Infirmary, Paisley. In 1938 the visiting medical staff numbered 20, of whom one was a consultant from Glasgow. Of the remainder, 18 were in general practice.

This hospital serves a population of nearly 150,000, mainly of industrial character. It admits general medical and surgical cases including a large number of fractures and other injuries, and there is a busy out-patients casualty department. There are on the staff a fully trained radiologist and pathologist (both on a whole-time basis and not included in those enumerated above). We are of the opinion that there is a clear need for reinforcing the staff on the clinical side. They should include a physician, at least one general surgeon, and an orthopaedic surgeon. The last named should be associated with the regional orthopaedic organisation and take part in the work of the orthopaedic clinics.

* Since 1938 a surgeon and assistant surgeon have been appointed.

105. **(4) Ayrshire Sub-region**

Ayr County Hospital. In 1938 the visiting medical staff numbered 12, all of whom were general practitioners.

This hospital serves a population of about 100,000, and the volume of work is such as to demand some reinforcement of the staff. The appointments should be made with reference to the requirements of Kilmarnock Infirmary and Ballochmyle Hospital. They should include a physician and a surgeon, who might also attend Ballochmyle, and a pathologist, who should be responsible for the laboratory services of the whole sub-region.

Kilmarnock Infirmary. In 1938 the visiting medical staff numbered 17, of whom 5 were consultants or specialists from Glasgow, who attended when required. Of the remainder, all except the medical superintendent were in general practice.

This hospital serves a population of well over 100,000, mainly of an industrial character. It admits general medical and surgical cases including a large number of fractures and other injuries, and there is a busy out-patient casualty department. We are of the opinion that there is a clear need to reinforce the staff by appointments, some of which might be on a part-time salaried basis. They should include a physician and a surgeon, who might also attend Ballochmyle. The services of the pathologist (see under Ayr County Hospital) would also be available.

106. **(5) Dumfries and Galloway Sub-region**

Dumfries and Galloway Royal Infirmary. In 1938 the visiting medical staff numbered 12. Six of them were consultants (three from Glasgow, two from Carlisle, and one from Edinburgh). Of the remainder, all but one were in general practice.

This hospital serves a population of about 120,000, now increasingly of an industrial character. There already is one surgeon on a part-time salaried basis, and there appears to be a need for an appointment of this character on the medical side.

There is a clear need also for the appointment, on a whole-time basis, of a pathologist, who would be responsible for the laboratory services of the whole sub-region.

DETAILED REPORTS ON THE SUB-REGIONS

GLASGOW SUB-REGION

GENERAL STATEMENT:

107. In the general scheme for the West of Scotland Region, Glasgow, being the University City and the centre of medical training, must have definite reservations of hospital beds for specific purposes available for the whole region, and the major hospitals in Glasgow must to some extent be regarded as parent hospitals to others throughout the region. There will, therefore, be a flow of special cases to Glasgow, and in estimating the requirements of the sub-region this must be borne in mind. In addition, there will be areas contiguous to the city but within the districts of other local authorities from which it must be expected that patients will have recourse in the first instance to Glasgow hospitals, particularly to the general hospitals.

AREA TO BE SERVED:

108. The area from which patients will naturally turn to the Glasgow Sub-region for general hospital services includes the City of Glasgow; Rutherglen; part of Lanark County, including Bishopbriggs, Baillieston, Cambuslang and adjacent districts; part of Dunbartonshire, including Bearsden and Milngavie,

and the Burgh of Clydebank; part of South-West Stirlingshire (a small rural area); part of Renfrewshire, including part of Paisley Parish and possibly part of the town of Renfrew. In addition, the Counties of Argyll and Bute will have to be served by the major hospitals in Glasgow, except perhaps in so far as emergency cases and cases of a minor character are concerned. These two Counties have populations of 61,600 and 16,560 respectively. Furthermore, the County of Dunbarton is very deficient in general hospital and maternity hospital provision, and until this is remedied the population must have recourse to Glasgow. An estimation of the population outside Glasgow which will have recourse to Glasgow hospitals might be put at about 180,000, and the total population to be provided for in the Glasgow Sub-region would thus be somewhere about 1,300,000. In the regional scheme it might be possible by administrative arrangement to allocate the extra population to Glasgow for the general hospital service. Infectious disease and tuberculosis, on the other hand, might have to be treated completely in the sub-regions to which the populations belong, but we would recommend that all services be provided by one administration if that is possible.

109. The following table shows the populations and districts which we consider will normally look towards Glasgow for their primary hospital services:

SUGGESTED GLASGOW HOSPITAL SUB-REGION

Population of Glasgow, R.G. Estimate, 1938			1,127,825
Add from Lanarkshire:			
Rutherglen	34,223		
Cambuslang Parish	27,129		
Cadder Parish	18,060		
Old Monkland (part)	5,000		
	84,412	say	80,000
Add from Stirling County:			
Parts of Baldernock, Buchanan, Drymen, Killearn, Campsie (The total population of these parishes is 8444.)			6,000
Add from Renfrew County:			
Cathcart	4,649		
Renfrew (part)	5,000		
Paisley Parish (part)	7,000		
	16,649	say	16,000
Add from Dunbarton County:			
New Kilpatrick	11,568		
Clydebank	47,912		
Kirkintilloch	17,309		
	76,789	say	76,000
Argyll and Bute *		say	30,000
Total added to Glasgow			208,000
Estimated Sub-regional Population			1,335,825

* Distance will affect the extent to which the people in Argyll and Bute will take advantage of the Glasgow services so that in respect of these Counties add 30,000, although the total population is 81,873.

HOSPITAL ACCOMMODATION IN THE SUB-REGION:

110. Table I shows the present hospital accommodation sub-divided into categories and into different classes of hospitals. Table II shows the beds which would be available under a regional scheme after adjustment for overcrowding and elimination of unsuitable or obsolete accommodation:

TABLE I

TABLE OF HOSPITAL BEDS

Based on 1938 *Figures* (*after Certain Minor Corrections*)

Name of Hospital	Total Beds for all Purposes.	Beds for Maternity Purposes	Beds for Infectious Diseases.	Beds for Pulmonary Tuberculosis.	Beds for General Purposes.
Glasgow Royal Infirmary	794	—	—	—	794
Canniesburn Annexe	140	—	—	—	140
Ophthalmic Institution	30	—	—	—	30
Schaw Home	72	—	—	—	72
Victoria Infirmary	460	—	—	—	460
Philipshill	240	—	—	—	240
Western Infirmary	625	—	—	—	625
David Elder Hospital	50	—	—	—	50
Elder Cottage Hospital	30	—	—	—	30
Redlands Hospital for Women	67	23	—	—	44
	— 2508	— 23			— 2485
Stobhill Hospital	1629	106	—	—	1523
Eastern District Hospital	296	32	—	—	264
Western District Hospital	270	43	—	—	227
Southern General Hospital	1211	62	—	—	1149
	— 3406	— 243			— 3163
Royal Maternity	175	175	—	—	—
Montrose Maternity	29	29	—	—	—
Homeland, Great Western Road	30	30	—	—	—
	— 234	— 234			
Royal Hospital for Sick Children	288	—	—	—	288
Drumchapel	92	—	—	—	92
Royal Samaritan	185	—	—	—	185
Ear, Nose, and Throat	88	—	—	—	88
Eye Infirmary	113	—	—	—	113
Royal Cancer Hospital	72	—	—	—	72
Homœopathic Hospital	30	—	—	—	30
Homœopathic Hospital for Children	28	—	—	—	28
	— 896				— 896
Belvidere I.D.	536	—	536	—	—
Ruchill I.D.	814	—	542	272	—
Knightswood I.D.	200	—	200	—	—
Shieldhall I.D.	98	—	98	—	—
	— 1648		— 1376		
Blawarthill I.D. 60*	—	—	—	—	—
Darnley I.D. 42*	—	—	—	—	—
Lightburn I.D. 76*	—	—	—	—	—
Robroyston (+12 E.M.S. Huts)	1068	—	—	260	808
Mearnskirk (+15 E.M.S. Huts)	1100	—	—	200	900
	— 2168				— 1708
Bellefield	108	—	—	108	—
	— 108				
Killearn † E.M.S.	640	—	—	—	640
	— 640				— 640
Totals	11,608	500	1376	840	8892

* Not included in Glasgow figures.

† Note that Killearn E.M.S. Hospital is included in this Sub-region.

Summary

Beds for "General" Purposes	8,892
Beds for Maternity	500
Beds for Infectious Disease	1,376
Beds for Pulmonary Tuberculosis	840
	11,608

Table II

111. TABLE SHOWING BEDS AVAILABLE UNDER REGIONAL SCHEME—after Adjustment for Overcrowding and Elimination of Unsuitable Accommodation.

Hospitals.	Total Beds.	Maternity Beds.	Infectious Diseases Beds.	Beds Reserved for Pulmonary Tuberculosis.	Beds for General Purposes.
Voluntary General Hospitals .	2448	23	—	—	2425
Voluntary Special Hospitals .	838	—	—	—	838
Voluntary Maternity Hospitals	234	234	—	—	—
Local Authority General Hospitals	2816	231	—	—	2585
Infectious Diseases Hospitals .	1376	—	1376	—	—
Local Authority Country General Hospitals . . .	1704	—	—	460	1244
Tuberculosis Sanatoria . .	380	—	—	380	—
E.M.S. Hospital	448	—	—	—	448
Totals	10,244	488	1376	840	7540

Summary.

General Hospital Accommodation	7,540
Maternity Accommodation	488
Infectious Disease Accommodation	1,376
Beds for Pulmonary Tuberculosis	840
	10,244

The total of 10,244 differs from the total of 11,608 given in the previous table by 1364 beds, and the difference is made up as follows:

Non-inclusion of (1) Elder Cottage Hospital . .	30 beds	
(2) Ophthalmic Institution . .	30 ,,	
(3) Homœopathic Hospitals . .	58 ,,	(30+28)
Reduction of accommodation in Stobhill . . .	180	590 beds
,, ,, ,, Eastern District .	90	
,, ,, ,, Western District .	119	
,, ,, ,, Southern General .	201	
Reduction to peace-time standards of E.M.S. Huts at Robroyston and Mearnskirk . . .	324 beds	
Elimination of Smallpox Huts at Robroyston . .	140 ,,	
Reduction to peace-time standards of Killearn . .	192 ,,	
	1364 beds	

General Review of General Hospital Accommodation:

112. At this point we would draw attention to the definition of general hospital accommodation as given in the introductory paragraphs of the report and especially to the inclusion of the chronic sick. This category on the other hand does not provide for the aged and infirm.

113. We propose to review in broad outline in the first instance the five large general hospitals, all of which are capable of rendering complete or almost complete services. They are the Western Infirmary, Glasgow, Glasgow Royal Infirmary, the Victoria Infirmary, Stobhill Hospital, and the Southern General Hospital. These would be classified as central hospitals, and should at the same time function as hospitals of first reception for defined zones.

114. The following table shows the total number of beds in the five central hospitals:

Hospitals.	Total Beds.	Not Available as General, etc., Hospital Beds.	Beds Available.
Western Infirmary, Glasgow (Voluntary) . . .	625	—	625
Royal Infirmary, Glasgow (Voluntary) . . .	794	—	794
Victoria Infirmary, Glasgow (Voluntary) . . .	460	—	460
Stobhill Hospital (Local Authority) . . .	1867	238*	1629
Southern General Hospital (Local Authority) . .	1600	389 (Licensed mental wards)	1211
	5346	627	4719

* These 238 beds are now converted to nurses' accommodation, etc.

To this total there is to be added in respect of :

(1) The Western Infirmary—David Elder Hospital . . .	50 beds
(2) The Royal Infirmary—Canniesburn Auxiliary Hospital .	140 ,,
(3) The Victoria Infirmary—Philipshill	240 ,,
Total	430 beds

Thus the total number of beds under the control of the five central hospitals becomes 5149.

On the best standards of space, Stobhill and Southern General Hospitals are to some extent overcrowded, and if a standard of 8-feet bed centres were adopted a deduction of 381 beds would have to be made in these hospitals. This would reduce the total to 4768.

115. All these beds are not used exclusively for treatment of Glasgow patients, or even for patients in the slightly extended area of the Glasgow Sub-region. In 1938, of the 42,000 patients admitted to the voluntary general hospitals, nearly 17,000 came from outside Glasgow. If the services in the other sub-regions are properly developed, the numbers coming into Glasgow would not be so large, but there would still remain those special cases where the services of key or special units are necessary. We estimate that about 5 per cent. of the central hospital accommodation will require to be made available for these incoming patients.

We therefore estimate that of the total of 4768 beds approximately 4500 would serve the population of the Glasgow Sub-region, with possibly some reserve for times of pressure. We would thus prefer to regard the central hospital accommodation available to the Glasgow Sub-region as 4500 beds.

Other Glasgow Hospitals included in the "General" Pool:

116. The other Glasgow institutions to be included in the pool of "general' hospital beds are :

Independent Specialised Hospitals	Number of Beds.	
Royal Hospital for Sick Children	288	
Royal Hospital for Sick Children Country Branch, Drumchapel	92	
Royal Samaritan Hospital	185	
Ear, Nose, and Throat Hospital	88	
Glasgow Eye Infirmary	113	
Ophthalmic Institution	30	
Royal Cancer Hospital	72	
	—	868
Corporation District Hospitals		
Eastern District Hospital	296	
Western District Hospital	270	
	—	566
Total		1434

A deduction for overcrowding must be made from the Eastern and Western District Hospitals to bring them within the 8-feet bed centre standard amounting to 209 beds, which reduces the total of 1434 to 1225.

117. There remain other two large institutions which should be merged in the "general" pool, namely, Mearnskirk Hospital and Robroyston Hospital:

Robroyston Hospital—1068 beds, of which 480 are in 12* Government war-time huts.

Mearnskirk Hospital—1100 beds, of which 600 are in 15 Government war-time huts.

*Two of these huts have been burnt down and have not so far been replaced.

The standard number of beds in each Government hut, (40), would have to be reduced by 30 per cent. to satisfy peace-time conditions. The peace-time standards of these two hospitals would then become:

	Original Hospital.	War-time Addition.	Total Beds.
Robroyston*	448	336	784
Mearnskirk	500	420	920
	948	756	1704

* 140 beds in Smallpox Huts not included.

118. These hospitals originally dealt entirely with pulmonary and non-pulmonary tuberculosis, but for some years they have received cases of other diseases. Robroyston has treated pneumonia and puerperal fever, and Mearnskirk has dealt with orthopaedics in children. In these two hospitals units are reserved for tuberculosis (pulmonary)—about 460 beds—and the remainder of the 1704 should be included in the "general" pool for units of specialism.

119. Killearn Hospital should in our view continue as at present to be associated with the Glasgow Sub-region. It has 640 beds which would be scaled down on peace-time standards to 448. Additional huts could be erected as required.

120. The total number of beds for general hospital purposes as shown in Table II, 7540, represents 5·8 beds per 1000 in a population of 1,300,000.

The above is a broad outline of the provision for "general" hospital cases. There are 620 beds in Barnhill Institution and Crookston Home for aged and infirm cases, at present being used for chronic sick persons as well. We are not adding them to the general pool.

Brief Description of Each Hospital:

THE FIVE CENTRAL HOSPITALS

121. (1) *The Western Infirmary, Glasgow* (625 *beds*) occupies a fairly open site adjacent to Glasgow University. It is centrally situated for the large shipbuilding and industrial area which lies towards the western side of Glasgow and extends into Dunbartonshire, including Clydebank. The beds are mostly in wards of 20 to 30 with the usual side-room accommodation. There is a modern ophthalmological unit, the Tennent Institute, with the beds in single rooms. Attached to the University Chair of Medicine is a special medical unit, the Gardiner Institute of Medicine, and it is intended to establish a similar unit for surgery. Wards are reserved for the treatment of diseases of the ear, nose and throat, diseases of the skin, and gynaecology. There is a busy out-patient department. The X-ray department is modern and large, with complete equipment for diagnosis and therapy. The hospital is a radium centre

and has a full-time radio-therapist. In the massage and physio-therapy department students are trained for the certificate of the Chartered Society. Recently an orthopaedic centre was established for the treatment of fractures and a whole-time surgeon has been appointed. During the war overflow patients have been sent to Killearn Hospital which also contains the country branch of the orthopaedic unit.

In-Patients admitted in 1938	12,804
New Out-Patients in 1938	45,816
Out-Patient Consultations in 1938	242,752

The close relationship between this voluntary hospital and the University emphasises its importance as a teaching unit, and every effort should be made to expand the teaching services for undergraduate medical students. Admirable teaching and research units are already represented in the Gardiner Institute of Medicine and the Tennent Institute of Ophthalmology, and plans are under examination for developing a similar unit in Surgery. We believe that this evolution is right and hope that it will apply in time to other special branches of medicine such as Psychiatry. We note with satisfaction that a new Fracture Clinic has been created in association with the appointment of a Lecturer in Orthopaedics in the Department of Surgery at the University.

In our opinion the Western Infirmary should be developed as a teaching hospital with special units for research. While it will be necessary to reserve a number of beds for general hospital cases for clinical teaching, the sacrifice of a proportion of existing general beds in the interests of highly specialised treatment, teaching and research should be regarded with favour in long-term planning. General medical and surgical work, especially for long-term cases, should be partly transferred to Killearn Hospital or some corresponding institution in country surroundings. More space and better conditions are urgently required for out-patient services and for special units such as the fracture clinic.

The hospital will, of course, take its place as one of the central hospitals of the region.

David Elder Infirmary, Govan (50 *beds*) was built in 1928 as an annexe of the Western Infirmary. It functions as a surgical unit, and all services are provided by the Western Infirmary. Suitable patients are taken from the Western Infirmary waiting list. There are 43 beds for general surgery and 7 for gynaecological cases. There is space for extension, and approximately 10 acres of ground are available for building. The wards which are single storey form two wings at right angles to the main corridor. There are several single rooms or cubicles. Theatre facilities are good.

The David Elder Infirmary may be regarded as a kind of south-side outpost of the Western Infirmary, which in any case extends its sphere of influence across the river ferries into Govan and Renfrew. This is not surprising, as the Western Infirmary lies close to the river and in particular to Govan Ferry. In a regional scheme, however, one is inclined to regard the river as a natural boundary, especially as ferries often cause delay. This reason in itself would not be sufficient to justify limitation of the territory of the Western Infirmary, but the recent great housing development in the north-west of Glasgow gives ample scope for its work in that area alone.

Our feeling is that in a regional scheme the David Elder Infirmary should be an annexe, perhaps for gynaecological cases, of the Southern General Hospital.

122. (2) *Glasgow Royal Infirmary* (794 *beds*) is situated in a congested tenement district of Glasgow. The site is, open on the south and south-east sides. The present buildings were completed in 1915 and are of heavy grey stone construction. There are five medical and six surgical units (each with its own theatre suite), as well as special units for gynaecology, diseases of the ear, nose and throat, genito-urinary diseases, burns and skin diseases. There is also a separate casualty department with wards attached. The wards in the main buildings have 12 to 24 beds each. Their sanitary annexes are provided

in two turrets at the end of each ward and separated by a small ventilating corridor. Ward kitchen, sisters' room, resident medical officer's suite, and the customary accommodation open from the entrance corridor to the wards. The original X-ray department is located in the basement and is thus cramped and dark, but some relief has been afforded by the provision of X-ray facilities in the new out-patient department. The kitchen premises are well sited on the top floor. The pathological block is a separate building and houses the pathological, bacteriological, and biochemical departments.

The new large and well-equipped out-patient department is in an adjacent building connected with the main building by underground corridor. It has been entirely reconstructed internally and has separate sections for fractures, X-ray diagnosis, massage and electro-therapy, gynaecology, dermatology, diseases of the ear, nose and throat, genito-urinary diseases, besides general medicine and surgery. The X-ray department is well equipped and all the barium work of the hospital is done there. In addition there are X-ray sets in the fracture and genito-urinary units. The fracture unit has 12 beds for in-patients. Diseases of the eye are treated in a small daughter hospital, the Ophthalmic Institution, which is situated centrally in the business part of Glasgow. It is probably the intention of the Governors that in time the Ophthalmic Institution be closed and re-established within the Royal Infirmary itself.

Associated with the Royal Infirmary is *Canniesburn Auxiliary Hospital* (140 *beds*), situated at the north-west boundary of the city. This is a new institution primarily intended to take convalescent cases from the Royal, and private patients. It consists mainly of two-storey flat-roofed blocks connected by a long corridor. The convalescent portion has 16-bed wards and also rooms with 4 beds. The private section consists mainly of single rooms, but there are some double and 4-bed rooms. Nearly all the wards and patients' rooms open to balconies. There is a good operating theatre and a small diagnostic X-ray department. The site is a good one, being elevated and open, with room for extension.

The Royal Infirmary also has the *Schaw Home, Bearsden,* which is used for recovery and convalescence. No active treatment is undertaken here. There are 72 beds in a three-storey stone building. The site is good and there is room for extension.

It is conceivable that in a regional scheme there will be a need for even further extensions at the Royal to cope with out-patients and consultative work and the work of specialised departments, both indoor and out-patient. Rather than make further extensions on the site for this purpose it would probably be better to free some of the existing in-patient accommodation by devolving upon associated beds in outlying institutions a proportion of the medical and surgical in-patients, particularly cases of elective surgery, gynaecology, etc., and those requiring more than a short spell of treatment.

The rehabilitation centre, so far as we are aware, has no association with an orthopaedic section in a country hospital, and in our view this is essential for the proper development of the rehabilitation service. Ultimately the staff of the fracture department will require to be increased and facilities made available for the establishment of orthopaedic clinics in the area served by the Royal Infirmary. At present it appears that only one such clinic is held, in Motherwell.

The "Royal" provides extensive facilities for the teaching of medical students. There are three professorial units—pathology, medicine, and surgery—while each medical and surgical ward takes its quota of students for clinical instruction. The gynaecological wards are under the charge of a Professor of Obstetrics. The St Mungo School of Medicine—an extra-mural college—is closely associated with the Royal, and certain of the clinical teachers hold professorships in that college.

We have the feeling that at the time of our visit the staff of the hospital was overpressed with work. With the evolution of a regional scheme it should be possible to relieve this pressure by having most of the ordinary hospital work of the County of Lanark carried out by the district hospital proposed for that County.

123. (3) *The Victoria Infirmary, Glasgow* (460 *beds*) is favourably situated in a district which is primarily residential, in the south side of the city close to a large public park. The ground is rather steeply sloping, so that some of the blocks have three flats and others have five. The wards are mostly large, with 20 beds in main ward and side-rooms. The private block, which was completed in 1935, has four flats and a total of 80 beds, of which 32 are in single rooms. The private block contains the X-ray Department, which is equipped for diagnosis and treatment.

There are five surgical and two medical units. Wards are also set aside for gynaecology, diseases of ear, nose and throat, dermatology, ophthalmology, and one of the surgical flats is practically entirely given over to orthopaedics.

The casualty and admission departments and the out-patient department are too small. For orthopaedic out-patients a former ward has been converted and equipped. Plans for extensive additions to the Infirmary are in project, which will complete the building up of the site. These plans provide, among other things, for the new ear, nose and throat, skin, and eye wards up to a total of about 30 beds.

The Victoria Infirmary Annexe, Philipshill (240 beds), largely devoted to orthopaedic work, is very pleasantly situated in open country. The patients' accommodation consists of ten pavilions connected by a long covered corridor. Two of these pavilions formed the original hospital, and the remainder are war-time additions, but on a much superior scale of building and equipment to the standard Government hut. Only six pavilions are at present used for patients. Three are occupied by nursing and domestic staff, and one is a treatment block. The total accommodation for patients will ultimately be 300.

The Convalescent Home, Largs, is a converted mansion house in pleasant grounds, with accommodation for about 30 recovered patients. The beds are in rooms with 2–6 in each. There are no facilities for treatment. About 500 patients are sent to the home each year.

The Victoria suffers from defects common to many of the voluntary general hospitals: the site is awkward, cramped, and fully built up; its levels are confusing because of the steepness of the site. The main part of the hospital is on the usual design of last century, and the out-patient and special departments are much too small for the needs of patients and staff. In our view, the country annexe at Philipshill should be fully utilised for long-term cases, medical and surgical and orthopaedic, and the main hospital should be further reduced in total bed accommodation in order to provide ample facilities for out-patient and special departments.

We suggest also that this hospital should be considered as a possible centre for post-graduate teaching.

124. (4) *Stobhill Hospital* (1629 *beds*) occupies an elevated site on the northern boundary of the city. The wards are almost all in two-storey blocks and fourteen of these blocks are connected by corridor. The wards as a rule have 35 to 40 beds, including side-rooms. The hospital was constructed in 1900, and the buildings are substantial and well maintained. The adjacent mansion house, " Belmont," was presented to the Corporation, and prior to the outbreak of war was used as a home for young children and infants—70 cots. Beds are reserved for gynaecology, diseases of the ear, nose and throat, tuberculosis (38 beds), psychiatry, diseases of children, and maternity. The X-ray depart-

ment has complete diagnostic equipment in two principal rooms, and four deep therapy tubes in separate compartments. There is within the grounds room for additions of various kinds, and before the war the Corporation had planned to add a children's block of 250 beds.

To equip this hospital as a central general hospital it would be necessary to provide new and extensive out-patient and admission departments. This could be done at the main gate. The X-ray department would also require to be extended or transferred to another block. If therapy of cancer were undertaken on a large scale, a considerable amount of new accommodation would be required for this purpose. There is a new biochemistry laboratory but there is need of extension of the original laboratory for pathology and bacteriology. The psychiatric unit requires an out-patient department and offices.

At present the hospital might function as a central hospital with a limited zone from which patients could be admitted directly, but the area would require to be restricted until more adequate facilities are made available. The major portion of the hospital would be devoted to units of specialism, including ear, nose and throat, children's diseases, skin diseases, cancer treatment, neuro-psychiatric cases, gynaecology, obstetrics, etc., and a proportion of the beds would be devoted to the chronic sick.

By reason of its size and the standard of facilities provided, we suggest that Stobhill should be one of the five central hospitals of the region.

125. (5) *The Southern General Hospital* (1211 *beds*) has in addition to the 1211 beds for general sick, 389 licensed asylum beds.

The site is a level one in the centre of the shipbuilding area on the south side of the river. The hospital was a former poor law institution, now largely reconstructed and brought up to modern standards. The buildings are substantial and in good condition. The wards are nearly all in two-storey blocks, mostly connected under one roof, but there are five large separate buildings. The out-patient department is too small and congested. There is accommodation set aside for diseases of ear, nose and throat, psychiatry, children's diseases, and maternity.

This large hospital will no doubt be maintained as the principal municipal general hospital in the south of Glasgow. It has many good features—a satisfactory and accessible situation, and a number of well-constructed buildings capable of modernisation. Although much has been done to modernise this hospital there still remains a considerable amount to do. The principal extensions and alterations required may be summarised as follows—(1) extension of nurses' home to hold 200 bedrooms, with necessary additions to other accommodation; (2) new central boiler-house to replace the two old units that now exist; (3) maternity and gynaecological unit; (4) new mortuary and laboratory accommodation; (5) new medical staff quarters; (6) new casualty and out-patient department. There is no receiving or casualty department at present, and existing out-patient department is totally inadequate to cope with work; (7) new X-ray department, massage and light department—at present the three departments are housed in small, crowded, unsuitable accommodation.

The Southern General should become one of the central hospitals in the regional scheme on the same basis as Stobhill. It is very convenient as a consultation centre, and also for reception of casualties and acute cases from its surrounding population. The attitude of the public to this institution has completely changed during the past fifteen years, and there should be no difficulty about its final up-grading as suggested.

126. The function of these five major or central hospitals would be to receive accidents and emergencies and ordinary medical and surgical cases directly

from practitioners and from health centres. A system of zoning the city would give the best results in this respect. It is unlikely that the three large voluntary hospitals would be able to carry on the treatment of many long-term or chronic cases, but they should have a proportion. Transfer of long-term and chronic cases on a regulated basis would, of course, require to be made to other institutions. All the five hospitals would engage in the teaching of medical students, the training of nurses and technicians of various kinds, and in such medical and scientific research as may be found appropriate. They would act as consultative centres for the higher and more complicated specialisms. It is suggested that they might be associated with other institutions for the treatment of long-term special cases, long-term general cases, and for units of special types which it will undoubtedly be found advisable to establish in the out-lying or country hospitals. They should all take part in the general regional scheme for the treatment of fractures and industrial and other injuries, and should have an association with country orthopaedic units and with the regional rehabilitation service. It is unlikely that all of them will have a great deal to do with orthopaedics in children, as will be shown later.

127. With regard to the cancer scheme, it is suggested that the main treatment centres for cancer—radio-therapy and surgery—be established at the Royal Infirmary (in conjunction with the Cancer Hospital), the Western Infirmary, and Stobhill Hospital, and that the long-term treatment of cancer be distributed as will be found expedient in these three hospitals as well as in other hospitals in the sub-region. The three hospitals would provide accommodation for the key units for the special treatment of cancer under the centralised scheme for the whole region.

OTHER GENERAL HOSPITALS

128. (1) *Eastern District Hospital* (296 *beds*) is situated in a crowded tenement area in the east end of Glasgow. The site is very cramped, but the buildings are fairly modern, dating from the early years of this century, and are in good general condition. Besides the beds for general medical and surgical cases, of which the larger proportion are long-term and chronic, there are wards set aside for mental observation cases, gynaecology, and maternity. It is a general training school for nurses and for pupil midwives. The intention of the Corporation was to provide a large polyclinic or consultation centre on ground immediately adjacent.

This hospital has 296 beds, but the figure would be 206 on an 8-feet bed centre basis.

The future of this hospital presents some difficulties. The need for additional maternity hospital accommodation will be an important consideration in the immediate future, and more of the wards might be taken over for that purpose until such time as more suitable accommodation can be erected. Other parts might be used for special purposes such as chronic cases, ear, nose and throat operations, and two of the wards at present occupied by the mental observation patients might be devoted to physio-therapy and rehabilitation. The hospital is not far from the Royal Infirmary, but even so there would still be need for a consultation centre as originally intended.

We suggest that in the initial stages of the sub-regional scheme it should be devoted to the following purposes—(1) enlarged maternity unit ; (2) treatment of chronic cases ; (3) special units, *e.g.*, ear, nose and throat ; (4) large out-patient consultation centre ; (5) group practice centre ; (6) minor casualties.

For medical staffing and nursing training it would require to be associated with one of the larger hospitals.

129. (2) *Western District Hospital* (270 *beds*) is also situated in a congested area. The site is a poor one and is fully built up, with no possibility of

extension. The buildings date from the beginning of this century and are generally in good order, but considerable expense has been incurred within recent years in order to ensure the stability of the foundations. There are beds reserved for ear, nose and throat cases, and for maternity. The maternity section is in a separate building. The hospital is a training school for nurses and pupil midwives.

This institution, which has at present 270 beds, would take comfortably 151 on an 8-feet bed centre standard. Being situated in a densely populated industrial area of the poorer type, it serves a useful purpose in providing minor casualty and out-patient services as well as in-patient accommodation. The majority of the in-patients are medical and of the chronic sick type.

As with the Eastern District Hospital, the future of the institution in the sub-region presents some difficulty. It is probable that one of the first requirements will be for additional maternity accommodation, and some of the wards might be adapted for that purpose as a temporary measure. There will also be a need for greatly increased consultative facilities, and it may be necessary to convert one of the blocks for that purpose. If too much of its general work is taken away it will not be able to continue independently as a training school for nurses, but this difficulty could probably be overcome by arrangement with one or other of the central hospitals. The need for a separate clinic for sick poor will disappear under a comprehensive medical service, and doubtless a practitioner group centre could be formed in the existing out-patient building.

We think the immediate future of the hospital should lie in providing (1) additional maternity accommodation; (2) continuation of a portion for chronic sick; (3) reconstruction of part as consultative centre; (4) group practice centre; (5) station for minor casualties.

Both the Eastern and Western District Hospitals are in densely populated poorer districts which will, in the course of time, be improved and re-developed so that there may not always be the need for institutions such as these two in their present location. The hospital provision generally will doubtless have to be adjusted to the changing population, and we expect that the trend will be towards the peripheral districts of the city.

130. Note on the Outdoor Medical Service for the Sick Poor in Glasgow. This service was instituted as a whole-time medical service during the years of industrial depression when the poor roll and the lists of persons receiving relief in one form or another were very large. If a comprehensive medical service for all persons is to be established, then the need for a special service for the sick poor will disappear and the consultation facilities and staff would be available for the treatment of the general population. Thus in both the Western and Eastern District Hospitals there will be no need for separate clinics such as operate there, to deal with persons entitled to treatment under the Poor Law.

131. (3) *Robroyston Hospital* (1068 *beds*). The original hospital consists of eight single-storey brick pavilions of 56 beds each, and a wooden smallpox hospital of 140 beds. It was opened during the 1914-18 war, and the smallpox huts were added afterwards. Twelve Government huts for patients and two for nurses have been added during the present war.

In peace-time the hospital was used for the reception of adult pulmonary and non-pulmonary tuberculosis. It also had beds set aside for pneumonia, puerperal septicaemia, and septic abortions. Two of the Government huts have been burnt down, and the remainder are being used for tuberculosis and for general hospital waiting list cases, mainly gynaecology. There are three adequate surgical operating theatres and an X-ray diagnostic department. It is affiliated with Stobhill and with the Eastern and Western District Hospitals for the training of nurses for the general part of the register.

The capacity of the hospital in peace-time would be :

Original Hospital	448
E.M.S. Huts (reduced by 30 per cent.)	336
Total	784

The original hospital is suitable for continued use for any hospital purpose. The sub-divisions of the pavilions make for flexibility. The smallpox huts are not so well suited for modern general hospital requirements. They are to some extent used for convalescent or ambulant tuberculosis patients but they are not well adapted for treatment of infectious diseases, including smallpox, in so far as the wards are large and there is no isolation accommodation. Also, the wooden construction makes cleaning difficult. The E.M.S. huts are not well sited, and are too close together. Distribution of coal for the ward boilers is not easy, and for continued use central heating from the main hospital steam supply would be essential. It is presumed that the two wards which have been burned down will in time be replaced. For a hospital of 800 beds an additional boiler would be required, and additions would be required to the laundry, kitchen, and nurses' and maids' home.

There is good ground for building to the south of the original hospital, and new permanent pavilions might be built there either in place of or in addition to the E.M.S. huts. The smallpox hospital will probably stand for another ten years, but it is doubtful if this is now the best place for such a hospital. The admission of smallpox cases causes great administrative difficulties in the main hospital, and it would be better if in the regional scheme a part of one of the fever hospitals could be separated off and earmarked for smallpox.

Despite its proximity to the City, its amenities are such that we would classify this hospital as a "Country General Hospital" and divide it into units of specialism. One of these units might be for pulmonary tuberculosis, perhaps 400 beds, and pneumonia and other chest diseases might be added to this. A new maternity unit is proposed by the Corporation and will be built within the grounds of the hospital. The remainder of the accommodation would be devoted to such general or special cases as the regional administration may require. As a general hospital there should be linkage of staff with one of the central hospitals, either the Royal Infirmary or Stobhill, and units could be served by resident surgeons and physicians as well as by staff from these hospitals. Training of nurses for the general part of the register could then be given.

132. Robroyston and Mearnskirk present a peculiar problem in regional administration. They are both large and well equipped. They can deal with long-term cases as well as selected cases of many special types, but are not suitable for first reception of casualties and general cases. We therefore consider that, the system of units of specialism is the best way of using both hospitals.

133. (4) *Mearnskirk Hospital* (1100 *beds*) is situated in open country some eight miles to the south of the city. It was completed in 1929. The normal accommodation was 500 beds in eleven single-storey pavilions, widely spread out in extensive grounds. Fourteen war-time huts have been added. The hospital was almost entirely devoted to the treatment of children suffering from non-pulmonary tuberculosis, pulmonary tuberculosis, and a modest number of orthopaedic cases in children. A few beds were reserved for the treatment of adult pulmonary tuberculosis. There are two surgical operating theatres and an X-ray department, as well as complete orthopaedic equipment, including plaster room and splint-making workshop.

On peace-time standards the number of beds available might be put at 920.

It would be advisable, if possible, to associate with Mearnskirk the Garrison Hospital at Millport, to which some of the long-term cases in children could be transferred as found expedient.

This hospital is one of the outstanding examples of what we term a " Country Hospital," and is eminently capable of functioning as one of the major units in the regional scheme. Probably the " B " type of war-time huts may have to be discontinued and replaced by others. There is apparently an abundant reserve of power for the installation of central heating in the huts. The hospital could be used for—(*a*) general medical and surgical cases—selected surgical and longish-term cases ; (*b*) special medical and surgical cases, children's unit in conjunction or collaboration with the Royal Hospital for Sick Children, orthopaedics, tuberculosis in adults and children ; (*c*) other special units as found expedient. We are informed that the Corporation intend to add a new unit for maternity cases.

134. The adjacent estate has been purchased by the Corporation, who intend to erect thereon a general hospital of 1000 beds for both acute and chronic sick. Thus within a few miles of each other there will be—

(1) Hairmyres Hospital, a large general country hospital with special facilities for orthopaedics and chest cases ;

(2) Philipshill Hospital, a 300-bed annexe of the Victoria Infirmary, dealing largely with orthopaedic and convalescent surgical cases ;

(3) Mearnskirk Hospital, as above described ; and

(4) The proposed new general hospital.

This interesting group of large hospitals provides an example of what might become with adequate co-operation a hospital city on a small scale, and its future development should be watched with great attention.

135. The following is a suggested development of Mearnskirk as an example of a country general hospital of the type described in the introduction to this report. Assuming that 972 beds would be available after the war, they could be utilised as follows :

Surgery	136 beds.	The cases treated would be mainly of types where operations are not of an urgent character, and the date of the operation could be fixed by arrangement. Cases of hernia, varicocele, chronic appendicitis, and certain chronic gastric conditions are possible examples.
Gynaecology	36 beds.	
Medical	180 beds.	These would be cases requiring treatment for a longer term than is usually given in city voluntary hospitals. They might include rheumatism and special groups such as disease of the gastro-intestinal tract requiring careful and unhurried investigation and treatment.
Otolaryngology . . .	72 beds.	A suggestion is that conditions such as chronic mastoid disease in children would do well here.
Orthopaedics	108 beds.	This unit would include orthopaedic diseases of children. It would be associated with the Royal Hospital for Sick Children and also, we think, with the Millport Group of Hospitals (*q.v.*).
Non-Pulmonary Tuberculosis . . .	222 beds.	These beds would really be part of the same unit as the above.
Pulmonary Tuberculosis and certain other Chest cases	218 beds.	A unit of this size would provide enough work for a senior specialist and one or two assistants. Its association with a large hospital would ensure that all diagnostic, surgical, and consultative facilities would be readily available.

The institution is thus sub-divided into units, the size of which can be varied according to need. The staff would consist of some visiting specialists and whole-time specialists as well. Of course there would be a sufficiently strong resident staff. An arrangement of this kind is actually in operation at present, although not so fully developed as now suggested, but there appears to be no reason why it should not work equally well if efficiently administered, under peace-time conditions. The arrangement has the advantage of enabling the hospital to train nurses for the general part of the Register, and thus would overcome certain difficulties in recruitment of nursing staff. It also helps to avoid the segregation of large numbers of tuberculous patients in institutions for that disease alone, and is a means of maintaining contact between the special work of pulmonary tuberculosis and other medicine and surgery of the chest. Suggestions such as put forward here should, we feel, be explored to the fullest extent in determining the use of these country hospitals.

136. (5) *The Elder Cottage Hospital* (30 *beds*) is a small hospital, situated in the centre of the Govan district. The building is old and the accommodation is rather cramped and deficient in certain respects.

We consider that this hospital is unsuitably placed as an independent unit in which major surgical work is carried out. It is too close to large hospitals and has not enough beds to stand by itself as a major unit. The number of beds stated is 30, but this is on a rather overcrowded standard. The separate nurses' home provides good accommodation for nurses on a modern standard.

This would make an excellent medical centre for group practice of general practitioners, and might provide in addition a few beds for normal maternity cases or for patients under short-term observation or treatment.

137. (6) *Redlands Hospital for Women* (67 *beds*) is in the west-end residential district of the city. It has a general section, which is a converted three-storey mansion-house without grounds, and a maternity home in a converted terrace house adjacent. Neither of the conversions is good. The maternity home has 23 beds.

The hospital takes only women and a few children. It is entirely staffed by women doctors.

With regard to the future of the hospital, we cannot see how it can be incorporated in the regional scheme except by continuing to take selected patients on its present basis. The regional scheme may provide advantages to this institution by making easier reference to pathological and other specialist services. The maternity section of the hospital functions almost entirely as a maternity nursing home, and there appears to be insufficient effort to do social or educative work. In view of its constitution and purpose, to provide opportunities for women medical and surgical specialists, it will continue as at present, but a definite linkage should be established with one of the major hospitals for laboratory, X-ray, and nursing services. The social and educative side, especially as regards the maternity work, requires development.

138. (7) *The Homœopathic Hospital* (30 *beds*) is also in the west-end residential area. It is a large house altered and adapted. It is equipped for surgical work, but only on a " nursing home " standard.

The Scottish Homœopathic Hospital for Children at Mount Vernon, is under different management, but the same principles of admission and treatment, etc., apply.

In the hall of the Glasgow Homœopathic Hospital there is a model of the proposed new hospital to be erected on a site not far from the present one. The new hospital is expected to have 200 beds and to be a four-flatted institution with separate nurses' home, theatre, administrative block, and out-patients' block—the whole on very modern and up-to-date lines.

It is very difficult to see how a hospital of this kind could be brought into a regional scheme. It is obviously an entirely individualistic concern which could only be kept going if left under complete control of the various homœopathic physicians. The present hospital is small, but the proposed new institution of 200 beds is a different matter. On the whole, we can see no other proposal to make than to leave the Homœopathic Hospital and the Scottish Homœopathic Hospital for Children out of the regional scheme.

139. (8) *Killearn Hospital, Killearn* (640 *beds*). This E.M.S. hospital is situated some fifteen miles north-west of Glasgow, with good access by road, but a poor train service. Under its war-time distribution of beds it has accommodation for 657 patients (about 450 on a peace-time standard). These are distributed as follows :

	Males.	Females.	Total.
General medical . . .	168	84	252
General surgical . . .	84	42	126
Neuro-surgical	26	26	52
Orthopaedic	126	42	168
Isolation and staff . . .	8	9	17
Peripheral nerve . . .	42	—	42

This hospital has a fine situation, but the available land is somewhat restricted. The inclusion of Killearn House and the surrounding lands would be of great advantage in post-war development. For peace-time use improvements would have to be made in the nurses' home, the sanitary arrangements for the wards, and the accommodation for day-rooms and recreation, library, etc. It would also be necessary to introduce central heating in place of the present series of small boilers, etc.

Under war-time conditions this hospital has formed a close association with the Western Infirmary, especially in relation to orthopaedics. This association should be continued and strengthened after the war. We recommend that Killearn Hospital should become a country general hospital for the north-western division of our area, with special sections for orthopaedics and neuro-surgery. We also suggest that the institution could be considerably extended, probably up to 1000 beds, and that other special units, for example pulmonary tuberculosis, might be added.

INDEPENDENT SPECIALISED HOSPITALS

140. (1) *The Royal Hospital for Sick Children* (288 *beds*) is situated on high ground in a congested industrial and tenement area in the west end of the city. It was built in 1914, and the buildings are well constructed and in good order. The ward accommodation consists mainly of large wards in two-storey blocks connected by corridor. There is an adequate pathological department, and the X-ray department is well equipped for diagnosis. Out-patient accommodation at the hospital is insufficient, and although there is a separate out-patient department in West Graham Street, it is a considerable distance from the parent hospital. The hospital requires a new out-patient department and it could then function as a regional consultative and special centre for diagnosis and treatment of diseases of children.

(*a*) *Royal Hospital for Sick Children, Country Branch, Drumchapel* (92 *beds*) occupies an excellent site on high ground at Drumchapel. There is at present open ground surrounding which might be used for expansion.

We are informed that the hospital is not a convalescent home, but an integral part of the Royal Hospital for Sick Children, to which patients are

transferred from the main hospital and may be transferred back. It is mainly used for the treatment of the longer term cases and for patients recovering from operations, etc.

If proposals are considered for enlarging this institution, we suggest that further facilities for treatment, surgical and otherwise, should be provided, together with resident medical officers, and also that provision should be made for closer supervision by the visiting staff of the Royal Hospital for Sick Children. At present active surgical treatment is not given at the Country Branch, and we are of opinion that in certain types of case there would be an advantage in establishing facilities for such active treatment.

(*b*) *Royal Hospital for Sick Children Dispensary,* West Graham Street, consists of red sandstone buildings dating from about 1890. The clinic section is a large octagonal waiting hall with a corridor running almost all the way round it. From this corridor open several consulting rooms—medical, surgical, and dental—as well as a staff room. There is also a dispensary and baths for patients. The consulting room accommodation on the ground floor, six rooms in all, is suitable for its purpose, and the surgical room is also suitable for minor operations. On the first floor there are consulting rooms for the venereal diseases clinic and a skin clinic as well as the caretaker's house. The other part of the building consists of a nurses' home with 12 bedrooms.

The accommodation at the dispensary at West Graham Street is old and in some respects rather out of date. It would be preferable to concentrate the out-patient work in the proposed enlarged department at the main hospital. The buildings might be used with advantage as a health centre for the district.

As regards the future of the Royal Hospital for Sick Children in a regional scheme, it seems on general principles desirable that children as far as possible should be treated under country conditions, especially when there is likely to be a long period of hospital treatment. The Country Branch, Drumchapel, is capable of further extension. Even so, it is highly desirable that the Royal Hospital for Sick Children should be more closely linked by arrangements for transfer of patients to country hospitals such as Mearnskirk and Killearn. The work of the hospital at Yorkhill could continue and develop in respect of consultative and special diagnostic work as well as scientific investigation into children's diseases, but some of the treatment could with advantage be devolved on outlying hospitals in the sub-region. For example, we do not think that there is any place for a large orthopaedic unit in the centre of the city.

The institution at present is over-pressed because of the demand for accommodation, and requires considerable relief in this respect. As mentioned elsewhere (para. 17) we have found that provision for children's diseases is deficient in most of the sub-regions, and we are of opinion that further provision should be made there. Under the regional scheme no doubt it will be possible to make administrative arrangements for standardising and, in conjunction with the Royal Hospital for Sick Children, improving the general standard of treatment of children throughout.

141. (2) *The Royal Samaritan Hospiial for Women* (185 *beds*) is a well built hospital on the south side of the city. The site is fully occupied by buildings. A private wing of 29 beds has recently been added. The hospital has an adequate X-ray department and a separate laboratory building. The Managers have obtained possession of two adjacent sites for the purpose of further extension, and they propose to build a new maternity hospital of 50 or 100 beds. In the circumstances we are of opinion that this additional maternity accommodation should be provided, partly because of the urgent need for additional maternity beds, and partly because it would make the hospital a more economical and less specialised unit.

As in other small independent hospitals with a single specialty, we feel that in the regional scheme the unit should be more closely and definitely

linked with one of the large central hospitals. Geographically it is within the area of the Victoria Infirmary, and it may be that a scheme could be evolved for closer co-operation with general medical and surgical staff and in the training of nurses. On the other hand, the Samaritan may be too large to link with the Victoria, and it might ultimately prove to be more feasible to form a liaison with the Glasgow Royal Infirmary.

142. (3) *The Ear, Nose and Throat Hospital* (88 *beds*). The buildings of this hospital occupy a congested site, but are of modern construction and well finished and fitted internally. There is a lack of small wards of two and four beds for segregation of cases, and there are no single rooms at all. The hospital was constructed as an ear, nose and throat hospital, so that the out-patient and surgical arrangements are suitable. The general equipment is of a high standard, and there is good provision for the teaching, both theoretical and practical, of students. The problem here is that this is a good unit in a not too good environment and separate from a general hospital, with the consequent isolation which this involves. A large amount of useful work, however, is done here, and we must calculate on the continuance of this institution so long as it is necessary to have small independent hospitals. Immediate steps should be taken to secure liaison with a central general hospital, both for medical staff and for training of nurses.

143. (4) *Glasgow Eye Infirmary* (113 *beds*). The site is fully built up in an older working-class and residential district in the western centre of the city. The wards are rather old-fashioned, but adequate for their purpose. The hospital is equipped with all modern instruments for examination and treatment of diseases of the eye. There is a good operating theatre and a small diagnostic X-ray unit. A large out-patient department and a new nurses' home were added in 1938 by converting a number of terrace houses for these purposes. The out-patient department is very well designed, and has good waiting rooms, record storage, treatment and examining rooms, as well as facilities for medical students. The hospital is a very busy centre and deals with accidents from all parts of the Clyde shipyard area.

This is an example of a special hospital which carries on a very large amount of work in its own specialty. The new out-patient department and nurses' home have improved the hospital considerably. As with all special hospitals, it is desirable to explore carefully avenues whereby closer association by staff, both medical and nursing, can be arranged with one or other of the central hospitals. The Eye Infirmary lies within what would normally be the zone of service of the Western Infirmary, and in our view there should be a definite linkage with that institution.

144. (5) *The Royal Cancer Hospital* (72 *beds*) is situated in the central part of the city on very high and steep ground. The site is very fully built up, and there is no possibility of extension. There are two portions, the Radium Institute and the Cancer Hospital proper. The beds are mainly in large wards, but in both the Cancer Hospital and the Radium Institute there are a number of single and double-bed rooms. A special research department functions on the top floor of the Radium Institute. The buildings are substantial, in good order, and generally suitable for hospital purposes. There is good operating theatre accommodation. This hospital shows all the defects of a small special hospital. The type of work done covers a very small field and mainly relates to intractable cases of cancer. The whole-time members of the staff are working at a great disadvantage dealing with small numbers of cases with restricted staff and restricted equipment. The unit is not large enough to form a regional centre for cancer treatment, and there is no obvious way of extending it. The name "Cancer Hospital" is unfortunate, and is bound to have an adverse influence as regards its present scope of work and its future. In point of fact a very considerable proportion of the cases come from outwith the city of Glasgow.

The chief therapeutic centres under the regional cancer scheme will of necessity have to be closely linked with the larger general hospitals and with University departments. After consideration of all the relevant facts we think that the Cancer Hospital might be linked up administratively and clinically with the Royal Infirmary, which is one of the main radium centres.

MATERNITY ACCOMMODATION

145. The amount of maternity accommodation, including ante-natal and lying-in beds, is very much below the present requirements, and still further below the expected requirements in the post-war period. The total number of maternity beds available for all purposes in hospitals is 500, of which about 300 can be regarded as lying-in beds. In addition to this there are some 170 in nursing homes.

146. The maternity beds are distributed as follows:

	Total Beds, including Ante-Natal.	Lying-in Beds.
Voluntary Hospitals		
Redlands Hospital	23	20
Royal Maternity Hospital	175	78
Montrose Maternity Home	29	26
Homeland, Great Western Road	30	30
	257	154
Local Authority Hospitals		
Stobhill Hospital	106	68
Eastern District Hospital	32	26
Western District Hospital	43	31
Southern General Hospital	62	31
	243	156
Total of Maternity Beds	500	310

The existing accommodation is summarised briefly as follows:

147. (1) *Royal Maternity Hospital.* Part of the buildings of this institution date from 1830. The newer part was opened in 1908, and a new block added in 1926. A new nurses' home was provided by reconstruction of terrace houses in 1928. With the exception, therefore, of the oldest part, which is only used for out-patients and for housing midwives working in the district, the institution is fairly modern, but it occupies a very congested site in a high part of the city, and it is not desirable that it should be extended for in-patient accommodation. The total number of beds is 175, of which 78 are described as lying-in and the remainder as ante-natal and "suspect" beds. The Maternity Hospital at present takes about 15 per cent. of its cases from districts outside the city.

No further additions for in-patients should be made to this hospital, but an out-patient department might be built on George Street if ground can be obtained giving accommodation for consultant, ante-natal, and post-natal work. The new building should also house other units of a Health Centre, and should have provision for medical students, training of social workers, etc.

148. (2) *Montrose Maternity Home* is in the Govan area, and consists of four villas linked together. It has 29 beds; 26 of these are usually occupied by lying-in patients.

This institution provides useful maternity beds at the present time, and will require to be continued for some years. As with all converted buildings, it has its defects and must be difficult to run from the nursing and domestic point of view. We consider, that it should carry on its present function until sufficient new accommodation for maternity is available.

149. (3) *Salvation Army Home, Homeland, Great Western Road.* This institution—two large mansion-houses—altered and equipped for normal

maternity work, serves its purpose well. It is owned and run by the Salvation Army primarily in the interests of the unmarried mothers, and the social work is excellent. Other patients—mainly working-class—are also taken on a pay basis. We recommend that the home should be included in the regional scheme and recognised as serving for the maternity care and social welfare of the unmarried mothers.

150. Maternity accommodation has been provided in the following hospitals, all of which have adequate labour room and other facilities :

(*a*) *Stobhill Hospital* (para. 124) has a complete and separate maternity unit of 68 beds, all of which are available for lying-in patients. Other wards in the hospital are reserved for ante-natal patients under the charge of the obstetrical staff.

(*b*) *Eastern District Hospital* (para. 128) has a unit of 26 lying-in and 6 ante-natal beds.

(*c*) *Western District Hospital* (para. 129) has 43 beds, of which 31 are for lying-in patients.

(*d*) *Southern General Hospital* (para. 125) has two wards in a surgical block reserved for maternity cases, one for ante-natal and the other for lying-in patients. It is intended that a new maternity section be built and that these wards should revert to use as general surgical wards, for which they are more suited than for maternity.

151. It might be added for interest that as a war-time measure maternity cases have been transferred early in the puerperium from some of the Corporation Hospitals to Lennox Castle E.M.S. Hospital, which has also a gynaecological ward. Lennox Castle is also equipped (30 beds) to deal with a certain number of confinements. During the war about 500 cases per annum were sent, under the evacuation scheme, to Haddo House (Aberdeenshire), Kingsmeadows (Peebles), and Fordbank (Renfrewshire).

ACCOMMODATION FOR INFECTIOUS DISEASES

152. There are seven hospitals for infectious diseases within the City of Glasgow, but three of these belong to outside authorities, and are not used for the treatment of Glasgow cases. The number of beds for infectious disease available for Glasgow is 1376, as shown in the following table :

Hospital.	Total Beds.	Reserved for Tuberculosis.	Available for Infectious Disease.
Belvidere Hospital . .	536	—	536
Ruchill Hospital . . .	814	272	542
Shieldhall Hospital . .	98	—	98
Knightswood Hospital .	200	—	200
	1648	272	1376

The effective number of beds in use for infectious disease but on a scale of less than 144 sq. ft. per patient is 1522, which represents 1·35 beds per 1000 on the present population of the city.

153. The three hospitals which belong to other authorities have between them 178 beds, viz. :

Blawarthill Hospital	60
Lightburn Hospital	76
Darnley Hospital	42
	178

Lightburn and Darnley do not appear to be quite fully used at present, but this may be on account of staff difficulties during war-time.

154. The Corporation of Glasgow had under construction at the outbreak of war a new fever hospital of 350 beds at Cowglen to replace Shieldhall, which has become obsolete and has been scheduled for abandonment for many years. The new hospital will increase the net total of infectious disease beds by 252, thus making the total number up to 1628.

155. The three hospitals, Blawarthill (para. 320), Lightburn (para. 371), and Darnley (para. 401) are described under the sub-regions in which they are administered, but none of them is of a standard justifying their continuance in the developed scheme as independent units for the treatment of infectious diseases. They are each too small to be efficient according to modern requirements, and should be abandoned for their present purpose. With some reconstruction they might be utilised to house aged and infirm invalids, providing approximately 190 beds for this purpose.

The following are some general remarks on the Glasgow Fever Hospitals.

156. (1) *Belvidere Hospital* (536 beds) was opened in 1870 and pavilions were added in 1885. Most of the buildings are therefore over sixty years old. The site is a low-lying one by the banks of the River Clyde and in the industrial east end of the city. It has 46 acres, but there is no more of the site available for building.

Much of this hospital is obsolete and the site is not attractive. The hospital will require to be retained for its present purpose for some time to come, but on consideration of its age and condition, and its damp, low-lying site, we do not think that it would be wise to spend much money on new buildings or even reconstruction. Repairs to the older buildings will become a growing charge, and in any case the design of the wards is out of date.

We recommend that the accommodation provided for patients should be gradually curtailed and that a new hospital on a more suitable site in the east end of Glasgow be constructed as part of the post-war hospital programme.

157. (2) *Ruchill Hospital* (814 *beds, including* 272 *for pulmonary tuberculosis*) is situated in the northern part of the city in an industrial but not very congested district. It occupies a favourable site on a hill-top. The buildings were completed in 1900 and are substantial. There are 16 blocks, each containing either one or two separate ward units, three wooden huts (which are not satisfactory), and eight pavilions for tuberculosis separate from the fever part.

Ruchill Hospital can, with some modification, satisfy the criteria of a modern fever hospital. It requires certain alterations to the ward blocks to bring them completely up to modern standards—more ward annexe accommodation and more isolation beds. It also requires substantial addition to the nurses' home.

As far as the treatment of pulmonary tuberculosis cases is concerned, the work done is of good standard and includes all modern thoracic surgical methods.

The X-ray department is not well suited for out-patients because of accommodation and difficulty of access, and other arrangements should be made elsewhere for this purpose.

158. (3) *Knightswood Hospital* (200 *beds*). The hospital occupies a favourable site in the west end of the city. The present accommodation has mostly been added piecemeal to what was a small infectious diseases hospital first opened in 1877. The administrative block is the original mansion-house.

There are nine pavilions in use for patients and one obsolete pavilion used as X-ray department. Many of the pavilions are of experimental design. The hospital might gradually be rebuilt in part on a concerted plan, and we consider that it should continue in use as at present, but it should be enlarged. This could be done in part by constructing a new two-storey pavilion of 30–50 beds. Even with this addition the hospital is still on the small side to be an

economic unit, and we recommend the replacement, as soon as circumstances permit, of the existing wards by two-storey pavilions of more modern construction, providing a substantial increase in bed accommodation. In anticipation of possible extension, the Corporation has acquired seven and a half acres of ground adjacent to the hospital.

159. (4) *Shieldhall Hospital* (98 *beds*) is obsolete in almost every respect, and will be closed down when the new hospital at Cowglen is opened. The site of the hospital might be developed as an annexe to the Southern General Hospital, possibly with accommodation for the aged and infirm.

160. The new hospital at Cowglen (350 beds) should be completed within two or three years after the conclusion of the war. It will probably be necessary, however, to add considerably to the accommodation, even to double its size. This question is discussed more fully later.

161. In our view there is a shortage of beds for infectious diseases at present, particularly as a result of the admission of large numbers of cases of respiratory infection during the winter months.

162. Provision for major infectious diseases such as smallpox is also a question which must be settled on a regional basis. The present smallpox hospital at Robroyston consists of five wooden huts (140 beds), with nurses' home, etc., in a separate compound. A hundred of these beds are normally used for tuberculosis, so that they have to be evacuated to receive smallpox. The huts are in fair condition, but are most inconvenient for administration because of their size and the difficulty of segregating cases. Probably the best way of meeting the contingency of smallpox occurring in the region would be to allocate beds for this purpose in one of the new fever hospitals which will be built outside the city. An arrangement could be made whereby it would be used normally for ordinary infectious diseases, but one pavilion kept vacant ready to admit cases of smallpox. In the event of a large epidemic the whole hospital could be evacuated. It is unsatisfactory to have several small smallpox hospitals in isolated situations kept empty, and maintained solely for this purpose.

TUBERCULOSIS

163. Treatment of pulmonary tuberculosis is carried out in Ruchill (272 beds); Robroyston (pulmonary and non-pulmonary disease in adults—588 beds); Mearnskirk (non-pulmonary disease in children as well as pulmonary disease in children and in a limited number of adults—500 beds); Bellefield Sanatorium, Lanark (108 beds for female pulmonary cases and a few children); Knightswood Fever Hospital (80 beds are used for adult male pulmonary cases). One ward in Stobhill was reserved for phthisis cases. Cases were also sent from Glasgow to Bridge of Weir Sanatorium, Ochil Hills Sanatorium, and Lanfine Home.

164. (1) *Ruchill Hospital.* The tuberculosis section, contains eight pavilions with nurses' home and X-ray department. Part of one ward has been converted into an operating theatre for minor surgical work. The main theatre in the fever hospital is used for major thoracic surgery. The accommodation at Ruchill is suitable for the hospital type of case, and although not ideally situated, it will require to continue its present work.

165. (2) *Robroyston Hospital* has been briefly described above; it should continue to treat pulmonary cases, including adults with non-pulmonary complications. Robroyston, with the war-time huts, has now 1068 beds, and some 300 of these might be reserved for tuberculosis.

166. (3) *Mearnskirk Hospital.* The original part is largely fitted for the treatment of children, but it should take some adult cases. The total number of beds in the institution is 1100, and of these 500 or more might be devoted to pulmonary and non-pulmonary disease.

167. (4) *Bellefield Sanatorium, Lanark* (108 *beds*), is very suitable for the sanatorium type of case and should continue for its present purpose. It is situated in open country. The original mansion-house has been converted and extended as administrative and staff quarters. There are three pavilions of modern construction with facilities for patients who are up and about. There is a large dining hall. The grounds are well laid out and attractive.

We recommend that this institution be continued a sanatorium with further extension if possible. It would of course maintain close association through the medical staff with the other institutions concerned with the treatment of pulmonary tuberculosis and chest diseases. It should be provided with occupational and rehabilitation services, in addition to the present garden, etc.

168. The wards in the general hospitals—Stobhill and Southern General—are not very well suited for tuberculosis cases other than those of very advanced character. Probably it would be advisable to move these cases elsewhere ultimately, although, in the immediate future it may be necessary to allot more accommodation to this disease.

169. The total number of beds for pulmonary diseases was about 900, and for non-pulmonary disease there were about 500 beds between Mearnskirk and Robroyston. The 900 beds for pulmonary tuberculosis were equal to a little over one bed per death from this disease per annum. Much more than this is required now and will be required in the post-war years.

170. *Baird Street Auxiliary Hospital,* 35 *Baird Street, Glasgow* (30 *beds*). This building, which was originally a reception house for typhus and smallpox contacts, should continue its present function, namely, treatment of lupus, ophthalmia neonatorum, venereal diseases, scabies, and pulmonary tuberculosis (artificial pneumo-thorax refills) in the meantime. There are three flats and an attic flat. The first and second flats are occupied by wards and the artificial pneumo-thorax clinic ; the latter is provided with X-ray screening apparatus.

This auxiliary hospital serves a useful purpose as a centre for clinics and other special functions, but the future development will probably be in the direction of forming a group practice centre for general practitioners with possibly some " general practitioner " beds.

AGED AND INFIRM CASES

171. As stated in the earlier part of this section (para. 21), a planned scheme of hospital services will be subject to grave difficulties until it can solve the problem of caring for the chronic sick and the aged and infirm. The beds available at present for aged and infirm are small in number—some 620—and these are in two institutions, Barnhill and Crookston Home. A further 400 beds in the poorhouse part of Barnhill are at present occupied by chronic sick cases.

172. (1) *Barnhill.* The "sick" beds in Barnhill are within the grounds of the institution in what is called the hospital portion, which is of more modern construction than the rest of the institution. It is administered by the Welfare Committee, and will require to continue meantime for its present purpose. Barnhill is in the northern part of the city, and as far as treatment is concerned can readily be supervised from Stobhill.

The older parts of Barnhill are on the usual poor law institution standards.

The total number of beds is 1670. Of these 320 are in the more modern hospital blocks, and are quite suitable for chronic sick and aged and infirm cases.

The intention of the Corporation, we understand, was to abandon the institution, but it is doubtful if this can be done for many years to come, particularly if the demand for accommodation for chronic sick and aged and infirm cases continues to increase. Without the extra provision made at Barnhill during the war for the admission of chronic sick cases, the position of the general hospitals would have been extremely difficult.

We therefore recommend that it should continue meantime to deal with these groups of cases in the hospital blocks, and in default of better arrangements it may be necessary to alter and equip some of the older parts of the institution for this purpose also.

173. (2) *Crookston Home* (300 *beds*) is a more modern building, and is generally suitable for its purpose. The ward blocks are of three storeys, and have large verandahs which are used as day-rooms by the inmates. Kitchen and dining hall are excellent.

The home is situated in the south-west of the city. The site is open, although the surrounding land is being developed for housing. Associated with the home are the "cottages," which are really small flats for aged people. These flats consist of a combined sitting and bedroom, with bathroom and kitchenette —the furnishing and finish being of a very high order.

The situation of Crookston Home is such that its medical requirements could be supervised from the Southern General Hospital.

174. (3) *East Park Home, Maryhill, Glasgow.* This home deals with crippled children and is unfortunately situated in a closely built-up tenement area of the city. Although the buildings are good and well provided with sanitary and other equipment, we do not think that it should continue to be used as a home for cripples.

We suggest that consideration might be given to its reconstruction and adaptation as a home for normal maternity cases.

CONVALESCENT HOMES

175. It was noted that the Glasgow Royal Infirmary had a convalescent home (the Schaw Home) at Bearsden (para. 122), and also a number of beds for convalescent cases at Canniesburn (para. 122). These beds could be used for early convalescence or for continuation of treatment from the Royal Infirmary. Distinguished from such accommodation, there are numerous convalescent homes to which patients are sent when treatment is completed in order to give them a period in the country or at the sea-side. Active treatment is not usually given at these homes, and it is doubtful if in any of them organised attention is given to rehabilitation. The Western Infirmary and the Royal Infirmary send cases to Lenzie Convalescent Home (80 beds), and the Victoria Infirmary has a convalescent home of 30 beds at Largs (para. 123).

We have not visited all these convalescent homes, and several of them have not replied to the questionnaire. Many convalescent homes are administered by voluntary bodies and charitable societies, trade associations and unions, and are available for Glasgow cases. A central agency in Glasgow handles applications for admission to various holiday homes for adults and children.

NURSING HOMES IN GLASGOW

176. There are in all about 37 nursing homes in Glasgow, which might be classified as follows :

Nursing homes (general)	15*
Nursing homes, chronic cases and old people	5
Nursing homes, maternity only	14
Nursing homes, charitable	3

* Surgical facilities in 14 ; X-ray apparatus in 6.

The total number of beds in these establishments is about 650, and of these 170 are available for maternity cases. The general nursing homes with surgical facilities range in size from 12 beds up to 56 in the largest. These homes are used by medical and surgical consultants for private patients. The largest home, the Macalpin, is governed by a Board of Directors on a non-profit-making basis, it possesses X-ray therapy apparatus in addition to diagnostic apparatus. Some of the general nursing homes have a few beds for maternity cases.

The maternity homes are generally smaller—4 beds upwards to about 20.

Five homes cater mainly for chronic cases and old people and do not have facilities for acute cases.

The homes under the heading " charitable " are for deserted mothers and children. They do not as a rule provide active treatment.

There are in addition to the above about 400 beds in three institutions for old people and young children. These are residential establishments run by charitable and religious organisations, and do not come within the Survey.

177. **Pay Beds.** Beds for paying patients exist in a private wing in the Victoria Infirmary—80 beds (para. 123). The Royal Infirmary Annexe at Canniesburn (para. 122) has about 100 beds for paying patients, and in the Samaritan Hospital (para. 141) there is a block of 29 beds. Redlands Hospital makes charges for treatment received. The total number of pay beds in Glasgow may be set down as follows :

Royal Infirmary—Canniesburn Annexe	100
Victoria Infirmary—Private Wing	80
Redlands Hospital for Women	67
Samaritan Hospital	29
	276

ESTIMATED REQUIREMENTS OF THE SUB-REGION

178. The following table shows the number of hospital beds in each category and the deficiencies according to the standards set forth in the introduction to this report. The rates given in the table are calculated on a population basis of 1,300,000.

TABLE OF EXISTING HOSPITAL ACCOMMODATION AND ESTIMATED REQUIREMENTS.

Classification.	(1)		(2)		(3)		(4)	(5)
	Present Accommodation.	Rate per 1000.	Present Accommodation (adjusted for overcrowding, etc.)	Rate per 1000.	Estimate of Total Accommodation required.	Rate per 1000.	Deficiency (3)–(1)	Deficiency (3)–(2)
	Beds.		*Beds.*		*Beds.*		*Beds.*	*Beds.*
General	8,892	6·8	7,540	5·8	10,400	8	1,508	2,860
Maternity	500	0·38	488	0·38	1,300	1	800	812
Infectious diseases	1,376	1·1	1,376	1·1	1,950	1·5	574	574
Pulmonary tuberculosis	840	0·6	840	0·6	1,800	1·4	960	960
Totals	11,608	8·9	10,244	7·9	15,450	11·9	3,842	5,206

179. There are two considerations to be emphasised in connection with this table. Firstly, it does not include accommodation for the aged and infirm. Beds in the hospital sections of the two poor law institutions, Barnhill and Crookston Home, amounting to 620, do not appear in columns (1) and (2). For the care of the aged and infirm patients a further addition may have to be made, and if a standard of two beds per thousand were adopted the total requirements would be 2600. Thus a deficiency of nearly 2000 beds is indicated for this type of case. There are at present over a thousand infirm patients, many bed-ridden, in the two poor law institutions; that is to say, some 400 are housed in the ordinary wards in Barnhill. Further, a recent census of the Corporation general hospitals showed that 840 patients were over sixty years of age—roughly 25 per cent. of the total in these hospitals. An uncertain proportion of that number are classifiable as aged and infirm. With the improvement in housing and the return to domestic work of many who have been occupied in the war industries it will be possible to nurse a larger proportion of such cases at home, but on the other hand there will probably be less willingness to do so, and there is also to be considered the fact that the proportion of aged people in the community is increasing.

180. The second point to which we draw attention in connection with the table is that if the conditions of a 96-hour fortnight were strictly applied to the nursing services a considerable amount of building of new nurses' homes would be required before even the number of beds available at present could be considered effective under the new scheme. As things are, many of the nurses' homes are overcrowded. Encroachments have been made on recreation and other accommodation, and in the Corporation hospitals alone an extensive programme of additions to nurses' homes will have to be undertaken.

181. The table indicates that 3842 additional beds are required immediately for all hospital purposes (including treatment of the chronic sick, but apart from the aged and infirm), and on a long-term policy 5206 are required. High priority should be given to maternity accommodation, and also to general hospital beds and beds for pulmonary tuberculosis—the latter two should be as far as possible grouped in the same institutions so that as the incidence of pulmonary tuberculosis declines the accommodation used for that disease can be diverted to general purposes.

182. **General Hospital Beds.** The deficiency amounts to 2860 beds, and the following suggestions are put forward as possible means by which the deficiency can be met.

The Corporation of Glasgow have approved of proposals to build a general hospital of 1000 beds in the Newton Mearns district south of the city. This hospital is intended to have beds for acute and chronic cases in the ratio of about 4 to 6. This question, however, would have to be further discussed in the light of possible future developments of the general medical services. The poor law types of patient for which the Corporation hospitals largely cater will no longer receive their medical treatment through a separate service. Therefore patients will be admitted to a hospital such as that proposed mainly by transfer from receiving hospitals or clinics within the city or through the hospitals' bureau. It is unlikely that the Mearnskirk General Hospital would be called on to receive cases directly—accidents and emergencies—from a zone in the city, although later expansion of the built-up area southwards may alter this and in time the new hospital might quite well function as a district hospital. As population is distributed at present its immediate function would be that of a country general hospital. There would thus be a group of large hospitals within a short distance of each other—Mearnskirk, Hairmyres, Philipshill, and the proposed new hospital. All these together may in the future form an important hospital centre.

To help to meet these demands the number of beds in the new hospital might be raised to 1500.

In the Victoria Infirmary it is proposed to add 30 beds (para. 123), and to increase the accommodation at Philipshill up to 300 (para. 123).

Killearn Hospital, which on a peace-time basis would have 448 beds, could be increased by the addition of huts to 1000 (para. 139).

At Stobhill Hospital there is a plan to build a new children's block of 250 beds (para. 124).

Thus the deficiencies in general hospital beds may be partly made up by—

(1) New Hospital at Newton Mearns	1500
(2) Additions to Killearn Hospital	552
(3) New Children's Block at Stobhill Hospital	250
(4) Increase at Victoria and at Philipshill	90
	2392
Leaving deficiency to be made up	503
	2895

The 503 beds could doubtless be obtained temporarily by allowing a certain amount of overcrowding above the ideal standards of bed-spacing recommended. On the existing standards the additions described above would give a surplus of 899 beds, but the existing standards (*e.g.*, 40 beds per ward in the E.M.S. huts), are very low for continued use in peace-time. Later some of the beds reserved for tuberculosis may revert to the general pool, but on the other hand it may be necessary in the immediate future to divert some of the existing general hospital beds for the treatment of pulmonary tuberculosis.

183. **Pulmonary Tuberculosis.** The required accommodation is stated as 1800 beds, and to attain this some 960 beds would have to be provided. We suggest that a somewhat larger allocation of beds in Robroyston and Mearnskirk be made for pulmonary tuberculosis in the meantime; that Bellefield Sanatorium should have an additional ward of 40 beds; that a unit of 200 beds might be reserved in the new hospital at Newton Mearns; and that possibly a further unit of 200 beds might be added to Killearn. The suggested accommodation would thus be—

Ruchill Hospital	272
Robroyston Hospital	300
Mearnskirk Hospital	300
Bellefield	40
Proposed New Hospital at Newton Mearns	200
Killearn Hospital	200
Total	1312

For the remaining 488 beds it may be necessary to have recourse to accommodation in other sub-regions where the demand may not be so acute. Also, some of the smaller existing tuberculosis institutions which are insufficient in size and equipment to provide all the treatment and other facilities required might be utilised for the accommodation of convalescent cases during or at the end of their treatment. We had in mind some of the smaller institutions in Lanark County and elsewhere. At present the Corporation of Glasgow by arrangement sends patients to Bridge of Weir Sanatorium, Ochil Hills Sanatorium, Bridge of Earn, Bangour, and Law Junction. It might be possible to continue these arrangements under the regional scheme. Failing a solution on these lines, however, it would be necessary to provide new accommodation for pulmonary tuberculosis; but we would stress that the need for extensive special accommodation on the scale set forth is likely to be temporary, and should not be required for more than, say, ten or fifteen years.

184. **Maternity Hospital Accommodation.** If it is expected that 75 per cent. of confinements will take place in institutions, then there is a considerable deficiency in maternity beds. All maternity hospitals and homes are at present very much over-pressed, and relief of this situation is one of the immediate

post-war problems. There are already several projects in the course of development for increasing the accommodation. The Glasgow Corporation is likely to construct new accommodation at the Southern General, Mearnskirk, and Robroyston Hospitals. There is also a possibility of extending the maternity accommodation in the Eastern and Western District Hospitals—at the expense of beds for general cases—and this is a project which we consider desirable as a temporary measure. The governing body of the Samaritan Hospital has plans for the construction of a 50-bed maternity hospital on a site adjacent to the Samaritan. We also understand that the Glasgow Royal Infirmary Managers have given consideration to the erection of a 50-bed maternity unit at Canniesburn. We suggest that this unit should be increased to 100 beds.

All these proposals would add 500–600 beds to the existing accommodation. In the immediate future some of the remaining deficiency could, to some extent, be made up from continuing use of nursing homes in the city.

185. **Infectious Diseases.** The deficiency in infectious diseases accommodation amounts to 574 beds, but it must be noted that Belvidere Hospital (536 beds) is now largely out of date and, as stated in our report on that hospital (para. 156), should not be added to or altered to such an extent that its life will be unduly prolonged. To accommodate the new nursing staff required to operate the 96-hour fortnight, we recommend that instead of enlarging the nurses' home and providing other additional services on a large scale, its patient bed accommodation should be reduced. A site should be found for a new hospital to the east of the city, which would be developed as Belvidere is gradually abandoned.

Meantime, if the new hospital at Cowglen, which was under construction when war began, could be increased in size to 600 beds, and Knightswood Hospital could be increased to 300 beds, this would go a considerable way towards making up the total deficiency.

The ultimate fever hospital accommodation would thus be—

Ruchill Hospital	542
Belvidere Hospital (or New Hospital)	500
Cowglen Hospital	600
Knightswood Hospital	300
Total	1942

The smaller hospitals, Darnley, Blawarthill, and Lightburn, would be closed down and ultimately, after alteration, diverted to the care of the aged and infirm.

186. **General Conclusions.** We suggest five central general hospitals, each acting as hospital of first reception to a convenient zone and also as parent hospital to other hospitals in its sector in the sub-regions. Independent special hospitals should be linked with the central hospitals, particularly as regards medical and nursing staff. Large additions are required to the number of general hospital beds.

The maternity accommodation requires extensive additions, and to this we would accord a high degree of priority. Beds for pulmonary tuberculosis are also urgently required for use during the next ten years or so and these should largely be provided in the country general hospitals.

Laboratory services for the city should, with normal development, be adequate for the purposes of both hospital and health services.

It will be seen from the foregoing that the deficiencies in hospital accommodation for the Central Sub-region (Glasgow) are very considerable. All the suggestions made here are necessarily tentative, and many of the alterations or additions which are suggested can only be confirmed after further detailed investigation and architectural and engineering surveys. Our aim has been to state the problem in broad outline having regard to the ultimate rational scheme of development for the hospital services of the region.

ARGYLL AND BUTE SUB-REGION

ARGYLL

187. The County of Argyll presents difficult problems in hospital organisation because of the large area covered and the sparsity of population. According to the 1931 Census the population of the County was 63,050 and the area 1,990,472 acres, the average number of acres per person being three. There are forty inhabited islands, the most populous being Islay with a population of 4970 and Mull with 2903. The total population in the islands amounts to 11,998. There are no large aggregates of population, although there are nodal points at Oban, Dunoon, Campbeltown, mid-Argyll (*i.e.*, the area around Lochgilphead), and Ballachulish. The island of Islay, because of its remoteness and the size of its population, might also be included in the list.

188. As might be expected, the question of transport of patients is one of particular difficulty. It is clear that transport to Glasgow is easier than to any other large centre, and is often easier than transport from one part of Argyllshire to another. By road, and particularly by rail, access from the northern half of the county, with the exception of Ardnamurchan, Sunart, and Morven, is not too difficult. Much of the south-eastern part is also within easy reach of Glasgow by steamer and rail. Campbeltown and Kintyre, however, are more difficult of access, and already air transport is used for this area. Air transport is also used in connection with certain of the islands, particularly Islay and Tiree. Transport from the island of Mull to Oban is assured by regular steamer services, but in certain types of case it would be desirable to continue the journey to Glasgow rather than to overload the existing limited services at Oban. Part of the area north of Loch Linnhe and the Sound of Mull forms a marginal district with Inverness, and conversely a small portion of Inverness-shire at the south-western tip may send a few cases to an Argyllshire fever hospital.

189. Improved road and air communications would have the effect of bringing most of the population within comparatively easy reach of the nodal points mentioned and of bringing the islands within reach of the major services on the mainland.

190. The following table shows the accommodation in Argyll County:

Type.	Hospital.	Beds.	
General	Dunoon Cottage Hospital	12	
	Campbeltown Cottage Hospital	14	
	West Highland Cottage Hospital, Oban	28	
		—	54
Maternity	Craigard Maternity Home, Campbeltown	14	
	Struan Lodge, Dunoon	12	
		—	26
Infectious Diseases	Victoria Isolation Hospital, Dunoon	25	
	Calton Isolation Hospital, Campbeltown	18	
	M'Kelvie Isolation Hospital, Oban	22	
	Mid-Argyll Isolation Hospital, Lochgilphead	14	
	Ballachulish Isolation Hospital	18	
	Gartnatra Infectious Diseases Hospital, Bowmore, Islay	14	
	Infectious Diseases Hospital, Tiree	8	
		—	119
Tuberculosis	County Sanatorium, Oban		36
Poor Law	West Highland Rest, Oban	26*	
	Witchburn House, Campbeltown	24	
	Gortanvogie House, Bowmore, Islay	10†	
		—	60

* Total number of beds in institution, 179. † Total number of beds in institution, 60.

The following are brief descriptions of the Argyllshire hospitals :*

191. *Dunoon Cottage Hospital* is a typical small cottage hospital. The building is substantial and has a good southern exposure. There are 12 beds for patients. The site has room for very moderate enlargement. There is a small fixed X-ray unit. The hospital is staffed by practitioners in Dunoon, each taking his tour of duty in rotation.

There is need for a combined hospital in this area—general (acute and chronic), maternity, infectious diseases, tuberculosis, and possibly aged and infirm. This unit would be closely affiliated with a central hospital.

192. *Campbeltown Cottage Hospital* is adjacent to Witchburn Home, and for war-time purposes a number of beds in the latter institution have been allocated to and staffed from the Cottage Hospital. There are 14 beds in two 6-bed cubicle wards and two single-bed rooms. There is an X-ray unit. The medical staff consists of general practitioners on a three-monthly rota of duty. A fair number of out-patients and accidents are treated.

We recommend that this hospital should be continued, with consideration of the practicability of erecting a combined hospital for all purposes to serve the area, linked with a major centre.

193. *West Highland Cottage Hospital, Oban,* is a cottage hospital of typical design, to which an extension was made about eight years ago. There are now 28 beds. At the present time there is continuous overcrowding, although prior to the outbreak of war the hospital was usually only occupied to three-quarters of its capacity. The site is awkward and there is no room for further extension. The approaches are steep. The hospital has the usual X-ray and operating theatre facilities. There is a full-time surgeon at the present time; this has become a necessity owing to the location of many temporary war workers in the surrounding area. The hospital receives patients from some of the Outer Isles as well as from the mainland. Most of the cases are surgical.

This is a useful collecting point for patients from the surrounding area on the mainland and from the islands. In its future development, however, transport must be taken into consideration. It may well be that patients arriving by steamer at Oban prefer to be taken straight to Glasgow by road or rail rather than interrupt the journey at Oban, but on the other hand there may be instances where this is necessary. Preliminary treatment of local accidents and emergencies might have to be carried out at Oban, even although transfer to Glasgow is ultimately desirable. Where air transport from the islands is used, the patients must of course come straight to Glasgow.

We think that on theoretical grounds, both from the point of view of economy and efficiency, a combined hospital for all purposes is the best solution to the problem of a district such as that of which Oban is the centre. It may be difficult to obtain a suitable site, and therefore the existing arrangements will have to continue for the time being. If accommodation for maternity is to be provided this should be built on a site which would form the future combined hospital.

194. *Struan Lodge, Dunoon,* is a converted house which provides 12 maternity beds. The house is comparatively small and patients' accommodation is in four separate rooms. There is apparently some difficulty in obtaining qualified staff at present. The site is limited and on an incline.

This home should be regarded only as a temporary measure until more suitable accommodation has been provided. A new maternity home is required, and might be made part of a combined hospital.

* Owing to difficulties of war transport it has not been possible to visit several of the outlying hospitals in this Area. The notes given should therefore be read with this reservation in mind.

195. *Craigard Maternity Home, Campbeltown,* also is a converted house, and was opened as a maternity home in February 1942. There are 14 beds. The average number of patients is 8. The house is a two-storey one, and the principal rooms—dining-room, sitting-room, and two bedrooms—are used for patients. The site is limited, with no room for extension. It is steeply sloping.

This home, should be regarded as only a temporary contribution to the needs of the county. A combined hospital for this area should provide a small maternity section to replace this unit.

196. *Victoria Isolation Hospital, Dunoon,* is a small infectious diseases hospital built on a site of about two acres. The total number of beds is stated to be 36, but is more correctly given as 25. There are three pavilions for patients built in the usual fever hospital style. Heating in one pavilion is by an open fire-place which also heats water for radiators, and in the other two there is central heating from a boiler in the basement.

There is a wooden hut with four beds originally used for tuberculosis patients, but now empty. The administrative block is a single-storey building with a small addition of three bedrooms. There is a new steam disinfector.

The staff is very small, consisting of matron, one fever-trained nurse, one assistant nurse, and one probationer. There is often no provision for night duty, in which case the nurse on night duty sleeps in the duty room of one of the pavilions. This unit is too small to be effective. It might be considered whether by rebuilding, a combined general, fever, and maternity hospital could be erected on the site. Probably some beds for chronic cases are also required.

197. *Calton Isolation Hospital, Campbeltown.* This hospital should be rated at 18 beds. It consists of two very small pavilions, administrative block, a wooden smallpox hut, laundry, and disinfector. The site is about one and a half acres.

As with Oban, it would be desirable to have in Campbeltown a combined institution with general—acute and chronic—beds, infectious diseases, maternity, and possibly some provision for aged and infirm. Meantime the infectious diseases hospital could be used as a reception station for infectious cases in the area. Cases with complications should be transferred elsewhere.

198. *M'Kelvie Isolation Hospital, Oban,* which is situated at some distance from Oban, was built in 1887. The approach is steep and the entrance from the public road is awkward.

The hospital consists of an administrative block and two pavilions for patients. There is also a timber and corrugated iron smallpox unit now used as a store, and another timber and corrugated iron ward of six beds used as a dormitory for the domestic staff. The total number of beds is 22, but on a 12-feet centre standard would be considerably reduced. One block, the Macpherson Block, is a newer building containing two 6-bed wards and accommodation for two nurses. Medical attendance is provided by a local general practitioner under the general direction of the County Medical Officer of Health.

This hospital does not appear to be very fully used. It is rather out of date in many respects and in our view should be abandoned, and for it should be substituted a new infectious ward in the suggested combined hospital.

199. *Mid-Argyll Isolation Hospital, Lochgilphead,* consists of a single pavilion (timber and corrugated iron) with 14 beds for patients. The site would probably take a certain amount of additional building. The patients' accommodation is divided into single and double-bedded cubicles.

The hospital is very little used, apparently, and we are informed that there were no cases admitted in 1938. It is too small to be an effective hospital unit by itself, and should be merged into a combined hospital to serve mid-Argyll.

200. *Ballachulish Isolation Hospital* is a converted house of two storeys, containing eight rooms with attics. A small additional brick building has been

erected as garage, laundry, and disinfector. Patients' accommodation consists of two wards on the ground floor and two wards on the first floor. There are 18 beds, but not of course on a 12-feet bed centre basis. There is one resident nurse, and local help is obtained when patients are admitted. The total number of patients dealt with during the year 1938 was 41.

This cannot on account of its structure and equipment be truly called a hospital. It is a home for the reception of infectious diseases, and should continue to be used for the reception of uncomplicated cases. Any others should be transferred to one of the larger infectious diseases hospitals in the region—in Glasgow.

201. *Gartnatra I. D. Hospital, Bowmore, Islay,* is a single pavilion with accommodation for some 14 patients. The site is a small one. The staff consists of one nurse and one maid.

Since the population of Islay is about 5000, it might be a practical proposition to have a combined institution of about 60–80 beds to serve the purpose of infectious diseases, general, acute and chronic, and maternity. There may also be some need for a few tuberculosis beds for reception or isolation.

202. *I. D. Hospital, Tiree,* is a small unit of 8 beds. Presumably some sort of accommodation for isolation must be made available on the island, and therefore the infectious diseases hospital would have to be retained.

203. *County Sanatorium, Oban,* was opened for patients in 1909. The administrative block is the original mansion-house, and three pavilions provide the accommodation for patients, together with recreation hut and dining hall.

The pavilions are of ornate design, and in one there are three chalets built on the flat roof, each having two beds. The accommodation generally is of good quality. There are 36 beds for patients. There are no special treatment facilities and no X-ray department.

We consider that in a proposed new combined institution there should be a reservation of beds for tuberculosis cases, and that the unit should form part of the regional scheme so that patients could be transferred to more specialised institutions where all the methods of treatment and rehabilitation are available. In such a scheme the Sanatorium would be used for isolation purposes and perhaps for early treatment prior to transfer elsewhere, or for convalescence.

The site is irregular, hilly, and partly wooded, so that facilities for extension are limited.

204. *West Highland Rest, Oban,* is a typical poor law institution, having a total of 179 beds, of which some 26 might be rated as hospital beds. The accommodation for sick persons is not good.

205. There is definite need for accommodation for chronic sick and for aged and infirm in Argyllshire, and the institution will have to continue until more suitable provision is made. We would like to recommend that a new hospital be built at Oban, combining infectious diseases, tuberculosis, maternity, general, acute and chronic cases. Such an institution might be built on the site of the West Highland Rest, but we doubt if there is enough space. Indeed, there may be some difficulty in finding a suitable site at Oban for an institution of the size contemplated, capable of being run in separate sections.

Thə existing hospital and other similar provision in this area is as follows :

West Highland Rest	26+153 Poor Law beds.
County Sanatorium	36
M'Kelvie I.D. Hospital	22
West Highland Cottage Hospital	28
	112+153 Poor Law beds.

A combined institution would therefore require 275–300 beds, more than half of which would be for chronic and aged patients. This is, of course, a long-

term policy, and the new institution would have to be linked up for staff purposes and transfer of patients with a central hospital in Glasgow.

For immediate consideration we put forward the suggestion that a maternity unit is required, and this should be built as the first instalment of the proposed new hospital. The other portions could be added as material and labour became available. The existing cottage hospital should be incorporated in the regional scheme and used for immediate treatment of accidents and for "general practitioner" cases, working in conjunction with one of the central hospitals.

206. *Witchburn House Poor Law Institution, Campbeltown,* is a two-storey building in the usual poor law design. Part of the building—one wing on the ground floor—has been taken over as office accommodation by the County Treasurer, while on the opposite wing about 30 beds have been taken into the E.M.S. Scheme to be operated by the Cottage Hospital which is adjacent. On the ground floor there are 32 beds in four wards and on the first floor some 18 beds. There is a separate hospital block consisting of two wards of 11 beds each and a 2-bed ward.

The site is completely built up.

The institution is adjacent to the Cottage Hospital, with which it should be combined for hospital administration.

207. *Gortanvogie House, Bowmore, Islay.* There are 60 beds for inmates, including about 10 for medical cases.

This poor law institution, we understand, is not much used, and the local authority have considered replacing it by a smaller one. It may be that the site could be used for the construction of a combined hospital for all purposes.

SUMMARY

208. It is clear that for major general hospital services the County of Argyll should continue to send cases to Glasgow. On the other hand, it would be of considerable advantage if, at the nodal points where there is some degree of aggregation of population, modified hospital facilities continued to be provided and improved. We put forward the suggestion that at selected places, such as Oban, Dunoon, Campbeltown, mid-Argyll, and possibly Ballachulish and the Island of Islay, small combined units should be constructed, comprising a section to deal with general acute and chronic medical and surgical cases, a maternity section for normal maternity cases, an infectious diseases unit on a cubicle system reasonably separate from the rest of the buildings, and also a suitable building for housing comfortably aged and infirm persons who have no one to look after them at home. These combined units might serve a population varying from 3000 to 6000, and would be under the medical control of a local practitioner who would be expected to make a particular study of administration of such units. One matron would have charge of the nursing section. For a population of 6000 the number of beds required might be put down as follows :

General	24–30
Maternity	6
Infectious diseases	12–15
Aged and infirm	10

The total would thus be somewhere between 50 and 60.

209. The hospital accommodation at present available within the county, when related to the population, gives the following rates :

General	·9 per 1000
Maternity	·4 ,,
Infectious diseases	1·9 ,,
Tuberculosis	·6 ,,
Poor Law	1 ,,

210. On the standards which we have adopted generally, the requirements of the county would be : general and poor law at 4 beds per 1000 (250 beds instead of the 114 now available). Many of the cases, however, would normally go to Glasgow, so that some reduction of this number might be permitted. For maternity purposes there are at present 26 beds. We consider that rather more than double that number is necessary and should be provided in small units at the more important centres of population. The infectious diseases accommodation is actually numerically in excess of what should be required for the population of the county, but being distributed in small institutions, it is inevitable that a considerable proportion of beds should be vacant and in fact some of the institutions wholly unoccupied by patients from time to time. The infectious diseases accommodation seems to be sufficient, although the combined institutions which we have suggested would provide an opportunity for better accommodation and facilities. Tuberculosis cases are admitted to the County Sanatorium, Oban. We feel, however, that tuberculosis should be treated in one of the larger regional institutions, and beds should be made available to the county. The County Sanatorium might be retained for out-patient treatment and as a reception station for new or for advanced cases.

The total number of beds required for the county would thus be in the region of 450, and these could be located in combined units of from 60 to 120 at the nodal points of population.

211. The question of staffing of general hospital beds, particularly as regards surgery, must be considered, and we feel that it is probable that in time there will be sufficient work among the various small hospitals for a whole-time surgeon. Where exactly he should have his headquarters in the county is a matter which could not be settled at the present time. Periodic visits by specialists from Glasgow might also be arranged for routine consultation and operative work. The more specialised work would doubtless come to Glasgow.

BUTE

212. The County of Bute presents somewhat similar problems to those of Argyll. The total population in 1931 was 18,823, distributed over seven inhabited islands, the largest being Bute with a population of 12,112, Arran with a population of 4506, and the Greater Cumbrae with a population of 2144.

213. Communication with the mainland by steamer from Bute and Cumbrae is regularly maintained, and transport facilities are good between these islands and Dunoon, Greenock, and Glasgow. In general, transport to Arran is also easy, but occasionally is interrupted by bad weather.

214. The general hospital provision consists of three small cottage hospitals and one poor-law institution. On the island of Cumbrae, St Andrew's Home and its auxiliaries provide some 484 beds for non-pulmonary tuberculosis cases. Most of these patients are sent from counties on the mainland. As with Argyll, the County of Bute must look to Glasgow for its major hospital services, while retaining some provision for reception of cases locally for general and maternity purposes and for isolation of infectious diseases.

The following table shows the number of beds in the County of Bute :

General	52*
Infectious diseases	50
Tuberculosis	484†
Poor Law	24
Total	610

*18 of these are for maternity cases.

†The beds in St Andrew's Home are almost entirely occupied by patients from the mainland.

The following are the hospitals in the County :

215. *Lady Margaret Hospital, Millport,* is a small cottage hospital of 14 beds. It deals with general cases mainly, but also has a few beds set aside for maternity and for infectious diseases. The provision is hardly adequate for the needs of the island.

The idea of a home hospital for the island is good, but it is essential to make minimum provision for the cases to be dealt with. This minimum would consist of—(1) two wards (M. and F.) for general medical care, with two single rooms, and suitable kitchen and sanitary accommodation ; (2) four double rooms for infectious disease ; (3) a small unit of, say, three rooms and a labour room—with separate kitchen and sanitary provision—for maternity.

216. *Victoria Hospital, Rothesay,* is a typical cottage hospital, opened in 1897, when it had 14 beds. More recently, since 1930, six maternity beds have been added. There is a small but useful out-patient department. School and infant welfare clinics are held in the out-patient department. All the doctors in the area are entitled to treat their cases in the hospital.

The population of Bute is roughly 12,000, and we consider that more accommodation is necessary, although it is fully realised that major cases should go to the mainland.

This hospital renders a useful service to Bute, and should be retained. Our observations on the subject of cottage hospitals are applicable to the Victoria Hospital, and we recommend that its functions should be restricted to medical care that lies within the scope of the general practitioner (that is, excluding major surgery, except in emergency, and specialised diagnosis and treatment). The nucleus of a health centre, including out-patient work in general, might well be expanded into full co-operation between the local authority and the voluntary body. The hospital should be linked, in accordance with regional principles, with the Glasgow Hospital Group (*e.g.*, the Western or Victoria Infirmary and the Southern General Hospital).

217. *War Memorial Hospital, Lamlash, Arran,* is a typical cottage hospital, built in 1922 of red sandstone. It occupies a limited site. The accommodation amounts to 12 beds for general cases and 6 for maternity. There is a small X-ray diagnostic unit, rather out of date, and a small operating theatre. Sterilising is very difficult with a pressure oil burner. There is no electricity or gas available. The surgical work is in the hands of a local practitioner (F.R.C.S.). Special cases are sent to Glasgow.

The hospital is sometimes crowded and sometimes relatively quiet, but on the whole it appears to be sufficient for the needs of the island. We are informed that 95 per cent. of the births in Arran take place in this institution.

The buildings are so constructed that extension would be difficult, but careful consideration should be given to the possibilities of adding two or three more maternity beds, a few more general beds, and some accommodation which could be utilised for the chronic sick.

218. *Robertson Stewart Hospital, Rothesay.* This fever hospital has nominally 45 beds, of which 7 are reserved for tuberculosis. A total of 30 beds would be a better figure. There are separate blocks for diphtheria, scarlet fever, and pulmonary tuberculosis, and an administrative block with accommodation for staff.

This small " mixed " hospital, taking fever and pulmonary tuberculosis, is quite unsuitable for the latter, as no provision can be made on such a small scale for the treatment and restoration of patients suffering from such a long-term disease. On the other hand, the Island of Bute certainly requires some accommodation for the isolation and treatment of simple cases of infectious disease, and at least a clearing house for emergency use. This hospital, brought up to date in post-war years, would serve these purposes reasonably well, but

it should be linked with a larger unit—the Glasgow Fever Hospital Service. It is only in this way that complicated cases can be adequately dealt with, and in the event of an epidemic, local overcrowding prevented. There is no real difficulty in arranging the transfer of a serious case to Glasgow.

219. *Ardmhor Isolation Hospital, Whiting Bay, Arran,* is a dwelling-house which has been adapted for the reception of infectious cases. The patients' accommodation is of varying quantity and might be put down as 6 beds, although 10 patients could be received. The necessary facilities in the way of sanitary equipment have been installed, and for its purpose the unit should be satisfactory. It is not permanently occupied, but a caretaker is in charge. When patients are received, nurses are obtained from one or other of the nursing corporations.

It sometimes happens that rather than open this small hospital a patient suffering from infectious disease is sent directly to a Glasgow fever hospital. When this happens, the ambulance is taken on board the steamer and shipped to the mainland.

220. *St Andrew's Home, Millport,* is a private hospital designed on sanatorium open-air lines for the treatment of non-pulmonary tuberculosis and other orthopaedic conditions in children. The original building is a house, but four ward blocks have been built in the garden. There is a plaster room, a shop for making and repairing splints, a small laboratory, and a room with a portable X-ray unit. Patients are admitted from the counties on the mainland. This institution does not therefore actually serve the County of Bute, but more properly belongs to the region. Associated with St Andrew's Home there is now the Garrison Hospital, a war-time hutted hospital, with 240 beds, and three other houses with about 19 beds each. The total accommodation in the group of institutions is 484.

For practical purposes this group of institutions is in private ownership, but renders a valuable public service in both peace and war. We do not feel called upon to make any recommendations about its structure or internal organisation, except to note that under war conditions there has been a certain amount of inevitable overcrowding, which could no doubt be remedied when peace conditions are restored.

It is not possible to forecast the exact functions or area of service of this hospital after the war, but we recommend its continued recognition as an open-air institution for the treatment of non-pulmonary tuberculosis in both children and adults. Its area of service would presumably include the City of Glasgow (in co-operation with Mearnskirk and the Royal Hospital for Sick Children), Renfrewshire, Ayrshire, Bute, and Argyll ; and we think that there should be a special link with Glasgow Health Department.

221. *The Garrison Hospital,* for which the Department of Health is financially responsible, might become a combined institution for the island, dealing with general medical and minor surgical cases, infectious disease, and maternity, thereby replacing the Lady Margaret Hospital. When this purpose has been served, any additional beds might be used for the reception of convalescent children from Mearnskirk Hospital (Glasgow Corporation).

222. *The Thomson Home, Rothesay,* is a small institution of about 24 beds for the reception of aged and infirm persons. A charge is made for maintenance.

This institution should continue in its present function.

223. In our view, the existing small units in Bute County should be continued and improved where necessary, particularly in respect of provision for the chronic sick and the aged and infirm. Serious cases and cases involving special treatment should go to the mainland—to Glasgow in the meantime, but later, perhaps, to hospitals in Renfrewshire. Tuberculosis should also be treated in one of the larger institutions on the mainland.

224. The total number of beds available for the County is—excluding St Andrew's Home, Millport—126. On a standard of 4 beds per 1000, some 76 general hospital beds would be required. For maternity about 20 beds should be adequate, and there are at present some 18 beds available. The standard of the accommodation could doubtless be improved. Infectious disease does not present a great problem, as there are some 50 beds which seems an adequate number. For the treatment of pulmonary tuberculosis we recommend that patients should be sent to larger institutions on the mainland. Non-pulmonary disease of bone and joint could be adequately dealt with at Millport. There is a scarcity of beds for chronic patients, and for this purpose it might be well to consider enlarging or rebuilding the existing cottage hospitals in order to provide for this group.

225. On a numerical basis, in relation to its population, the County is not badly provided with hospital beds, but as a matter of long-term policy the establishment of joint institutions for general, infectious diseases, and maternity cases is recommended after the same plan as we put forward for the County of Argyll. One such institution could be placed in Bute and another in Arran. In Cumbrae there is already this type of hospital, and with improvement it should meet the needs of that island.

AYRSHIRE SUB-REGION

226. The population of the county is estimated at 294,050 in the Report of the Registrar General for 1938. The greater part of the population is concentrated in an industrial triangle in the centre, with its base along the seaboard from Ardrossan to Ayr and its apex at Kilmarnock. Within this area are the large burghs of Ayr (66,297) and Kilmarnock (55,499), and a number of towns of considerable size such as Ardrossan, Irvine, Troon, and Prestwick. Present indications are that the central area of Ayrshire will increase in population after the war, especially in the neighbourhood of Prestwick, and, as development is likely to be rapid, it is important that the hospital services should be planned to deal with the problems of an expanding and prosperous community.

227. The Northern (Cunningham) division of the county tapers to a point at Skelmorlie, where the normal flow of hospital patients is towards Greenock. This is the only boundary problem in the north, as there is no railway between Wemyss Bay and Largs. The Northern division has a scattered population with a few industrial areas such as Kilbirnie, but is mainly dependent on agriculture and, at the coast, on tourist traffic. At present the majority of the people look to Glasgow for major hospital services, and will probably continue to do so; but with the development of a regional system district hospital service could well be provided in the Ayrshire hospital centres described below.

The Central (Kyle) division contains the great part of the industrial triangle referred to above, but has also a considerable rural area to the east of Kilmarnock and Ayr, extending to the Lanarkshire boundary. This area is served at present by the hospitals at Kilmarnock and Ayr.

The Southern (Carrick) division is extensive and almost entirely rural. A small industrial area between Ayr and Dalmellington and a number of holiday resorts by the sea are the only rivals to agriculture, and a large part of the west and south-west is inaccessible moorland. The people of this area look to Glasgow for major hospital services and to Kilmarnock and Ayr for their district hospital. We do not propose any change in the general flow of hospital patients.

228. With the exception of a small area at the extreme north of the county, Ayrshire should be able to provide convenient access to all hospital services, except the highly specialised work which goes to Glasgow to-day. The hospital

provision in the county in 1938 was inadequate on all counts, but the Ayrshire County Council were making up arrears in provision for maternity, tuberculosis, and infectious disease by the construction of a new central hospital at Kilwinning. This hospital was opened during the present war, and provides accommodation for infectious disease, tuberculosis, and maternity. Any calculation of beds at present available is complicated by the emergency situation : for example, it was the intention of the County Council to close the smaller fever hospitals, when the new central hospital was opened, and to make similar adjustments in the accommodation for tuberculosis and maternity. These changes are now in progress, but the elimination of out-of-date units is not yet complete. Again, shortly before the outbreak of war negotiations were in progress between the voluntary and the local authority hospital groups to discuss problems of co-operation ; these were interrupted by the war. And lastly, the picture of general hospital provision in the county has been entirely changed for the time being by the opening of the Department's large hospital at Ballochmyle.

229. The disposition of hospital beds at the present time is as follows :

Type.	Hospital.	Beds.	
General	Kilmarnock Infirmary	155	
	Ayr County Hospital	86	
	Ballochmyle	1268	(D. of H.)
	Bute Cottage, Cumnock	13	
	Davidson, Girvan	14	
			1536
Tuberculosis—Pulmonary	Ayrshire Central Hospital	60	
	Glenafton Sanatorium, New Cumnock	88	
	Kilwinning Sanatorium	24	
	Kaimshill Sanatorium, Kilmarnock	16	
			188
Maternity	Ayrshire Central Hospital	82	
	Seafield, Ayr	44	
	Kilmarnock Burgh Maternity Hospital	32	
	Buckreddan, Kilwinning	24	
			182
Infectious Diseases	Ayrshire Central Hospital	276	
	Heathfield, Ayr	124	
	Kirklandside, Kilmarnock	66	
	Springvale, Saltcoats	20	
	Cumnock	19	
	Davidshill, Dalry	22	
	Girvan	14	
	Irvine	12	
	Kilwinning	15	
	Crofthead Smallpox Hospital, Ayr	26	
			594
Poor Law	Kyle Home, Ayr	36	
	Cuninghame Home, Irvine	106	
			142

The number of beds in each hospital is as stated in the returns completed by hospitals. This is considerably more than we should regard as appropriate for a peace-time standard ; and, as will be seen from the following brief description of the individual units, some of the hospitals have been, or will be, abandoned, and others will have their accommodation reduced.

230. *Kilmarnock Infirmary* is a typical voluntary hospital of the " district " type. The original building, opened in 1868, is now the administrative block. Many additions have since been made, a west wing being completed in 1915 and an east wing in 1920. Internal alterations have also been made from time to time as new needs arose, with the result that the hospital adheres to no comprehensive plan and each new addition rests unconformably (as the geologists

would say) on the basic structure. More recent changes include the adaptation of two private houses in Hill Street nearby, the one used as a nurses home and the other for administrative and miscellaneous purposes. At the moment an E.M.S. operating-room has been installed there.

The site is central, on high ground close to the railway station. There is practically no room for extension, and indeed one has an impression of overcrowding on the existing site. The approaches are poor, and the district is noisy and smoky. The site is a good one from the point of view of an " acute " casualty hospital and a busy out-patient department, but it is less suitable for long-stay patients on account of lack of amenities, both natural and artificial.

The Infirmary is deficient in out-patient and special departments, and there is no adequate pathological service. The re-allocation of space reducing the number of existing wards would secure the necessary provision, and the hospital would then serve admirably as an " acute " casualty and out-patient hospital for the Kilmarnock section of the Ayrshire group. Long-term cases and patients requiring non-urgent surgical treatment could then be sent to Ballochmyle. The clinical work of this hospital is at present performed by general practitioners. Consultants from Glasgow are " on call," and cases of a special character are referred to the Glasgow teaching hospitals, but there appears to be a clear need to reinforce the staff by creating appointments.

We find that this hospital would provide adequate accommodation for accident and out-patient work if the general accommodation was reduced.

231. *Ayr County Hospital.* The triangular site of this hospital is enclosed by the river and public roads and is fully built up. Most of the red sandstone buildings are of two storeys, although in parts there are three. Accommodation is for 86 beds, but it is at present overcrowded. The out-patient department is situated in a separate block, which also houses the X-ray department. Facilities are inadequate and space is limited ; and there is no room for extension. The main theatre (in the central block) is well equipped and large. Kitchen accommodation is small, but equipment is good, as is storage accommodation.

The bacteriological work of the hospital is done at the County Laboratory, while pathological services are carried out at Glasgow Western Infirmary. The clinical work is done by general practitioners, with Glasgow consultants on call.

This institution could be transformed by reducing its general accommodation and emphasising accident and out-patient work. This hospital would then serve as a unit of the Ayrshire group, with the hospital at Ballochmyle as the central institution for long-stay cases, non-urgent surgery, medical cases, etc. The staff should be reinforced by additional appointments.

232. *Ballochmyle Hospital, Mauchline.* This hospital is well situated by the river Ayr. It was built under the Emergency Hospitals Scheme on the pavilion plan, and the arrangements follow the standard pattern of E.M.S. hospitals. The administrative block also contains the laboratory and dispensary. The wards are arranged in groups of eight, providing 40 beds in each on a war-time basis. By peace-time standards there is accommodation for 888 beds. All equipment is modern and adequate.

This hospital is suitably situated to become the central country hospital for Ayrshire, for the admission of general cases which would benefit by treatment in country surroundings. Under a regional scheme it would work in conjunction with Kilmarnock Infirmary (para. 230), Ayr County Hospital (para. 231), and the various home hospitals in the county. The Ballochmyle Hospital may be regarded as fit for general hospital purposes for at least fifteen years, but a plan of gradual rebuilding should be prepared. It will require certain alterations to convert it to peace-time use, with a reduction in the total number of beds.

233. *Bute Cottage Hospital, Old Cumnock.* This little cottage hospital is now maintained by public subscription, although it was originally instituted by the Bute family. The hospital is staffed by nuns, but there is no religious priority in the admission of patients. The building is of red sandstone and in good repair. The accommodation amounts to 13 beds, and facilities are good. The operating room is good of its type, but the X-ray room, although equipped, is not in use.

The unit is suitable for continued use as a home hospital, but is capable of dealing only with emergencies and " general practitioner " cases.

234. *Davidson Hospital, Girvan.* This is a well built modern cottage hospital of stone and has accommodation for 14 beds. Two single rooms may be used for maternity cases if necessary. Most of the work consists of accidents and cases under the care of the local practitioners. The operating room is fairly well equipped, and domestic facilities are good.

This unit should be retained as a cottage hospital with additional beds for normal maternity cases. There is room for extension on the site.

235. *Ayrshire Central Hospital, Kilwinning.* This is a new institution and is completely modern in its buildings, facilities, and equipment, with good theatre accommodation and X-ray department. The hospital is not yet fully occupied as the maternity section is still incomplete.* It is well situated to serve the county, and the accommodation it offers is 60 tuberculosis beds, 82 maternity beds, 276 infectious diseases beds.

This hospital should be used as a main sub-regional hospital for (1) fevers, (2) chest cases, (3) maternity cases. We also recommend that owing to the absence of any home hospital in the immediate neighbourhood, an " acute unit " should be set up here to deal with general emergencies and to provide out-patient facilities.

236. *Glenafton Sanatorium, New Cumnock.* This institution has been enlarged in every section since it was built in 1904 ; its structure is mainly of wood and corrugated iron and is now in need of repair. The situation is good but remote. Facilities are fairly good—X-ray equipment being sufficient for requirements—and there is all necessary equipment for minor chest surgery. The peace-time capacity for the institution is 88 beds.

The unit is suitable for sanatorium rather than hospital use, and should be retained for the care of patients convalescing from tuberculosis. Its outdoor facilities are very good, and could be extended to provide occupational training. In order to fit this institution for peace-time use a considerable amount of repair, redecorating, and sanitary reconstruction will be required. It should work in close co-operation with the Ayrshire Central Hospital at Kilwinning (para. 235) and provide for exchange of medical and nursing staff as well as ready transfer of patients according to their condition.

237. *Kilwinning Sanatorium.* This unit was originally a smallpox hospital, but was opened as a sanatorium in 1930. The combined administrative block and nurses' home follows the usual design of a country fever hospital, and the ward block has been improved by the addition of an operating room, where minor chest surgery is carried out. There is accommodation for 24 beds. The X-ray department is sufficient for the size of the institution, but the X-ray set is old.

We understand that there is no intention of using this building for tuberculous patients after the war, as these will be treated at the Ayrshire Central Hospital and at Glenafton. The building might be adapted for the care of the aged and infirm.

238. *Kaimshill Sanatorium, Kilmarnock.* The original hospital was built for the treatment of smallpox, but additions have been made since then. The

* Since the writing of this report the maternity section has been completed and occupied.

buildings are of brick and roughcast. Accommodation amounts to 16 beds, and although the site covers four acres, the surroundings are bleak. The unit is well run, but small; it lacks amenities, and is quite inadequate for the treatment of tuberculosis, or indeed for the treatment of the sick.

239. *Seafield Maternity Hospital.* This is a converted private house and gives accommodation for 44 cases. Its function is the treatment of abnormal cases where hospitalisation is necessary. Operations are carried out by the county obstetrician, but equipment, theatre, and labour room accommodation are unsatisfactory. At present the unit is overcrowded and should be discontinued for maternity work on the opening of the maternity section of Ayrshire Central Hospital. We understand that this building is to be taken over by the Education Committee.

240. *Kilmarnock Burgh Maternity Home.* This institution was opened in 1937, and is very modern and well finished; the equipment is both adequate and up to date. It is composed of a new building and a reconstructed dairy school. Accommodation amounts to 32 beds, and there are three labour rooms and one theatre. In the babies' washroom (normals) the basins are controlled at 100 degs. by thermostat. There is also a special nursery for premature, weakly, and injured babies.

This is a first-class maternity hospital dealing with about 700 cases per annum, and we recommend that it should be retained for its present use as part of the general maternity hospital provision for the county.

241. *Buckreddan Maternity Home, Kilwinning.* This is a useful maternity home consisting of a converted house and a hut block. The general arrangements are satisfactory, but kitchen accommodation and facilities might be improved. On the whole, service accommodation is somewhat cramped, but the unit can take 24 patients. The labour room is separate from the wards and rooms, and is sufficient in size and equipment. For peace-time use extension to service accommodation will be necessary, and there is sufficient space for this purpose.

This unit is suitable for the conduct of normal maternity cases and should be retained for this work.

242. *Heathfield I.D. Hospital, Ayr.* The site of this hospital covers 22 acres; it stands in a built-up area. Part of the site is reserved for a new maternity hospital, plans for which have already been prepared. The buildings are mainly of brick and consist of an administrative block and six pavilions, giving accommodation for 124 beds. There is no operating theatre. The V.D. clinic is good and modern, and the new nurses' home is excellent. Kitchen and laundry accommodation tends to be cramped, although equipment is good.

We consider that this unit is unsuitable for the treatment of tuberculosis, but might be retained for the treatment of infectious diseases under a county scheme. It is also unsuitable for maternity work. If this unit is retained for the treatment of local cases of infectious disease, it should be linked up with a general County scheme, centred on the Ayrshire Central Hospital at Kilwinning. It might be reasonable to retain a small diagnostic centre for tuberculosis, for use only as a clearing house for a " chest " hospital and for local patients attending for follow-up refills, etc.

243. *Kirklandside I.D. Hospital, Kilmarnock.* This institution consists of a well-built administrative block and four pavilions. The site covers 10 to 12 acres, so that extensions could be carried out easily. The wards are small, but accommodation is adequate, and 66 beds are available on a liberal space standard. Kitchen and laundry are well equipped. There are no theatre, out-patient, or radiological departments, and bacteriological work is done at the county laboratory. The hospital is not being used to its full capacity, and could cope with a much greater volume of work.

If this unit is retained for the treatment of infectious disease under the county scheme, it should be linked with the Central Hospital at Kilwinning.

244. *Springvale I.D. Hospital, Saltcoats.* This unit has now been converted into a war-time nursery. It should not be brought into use again for the care of the sick.

245. *I.D. Hospital, Cumnock.* This unit was originally intended to serve the rural area of South-Western Ayrshire, and is built of brick on the pavilion system. The structure is good and it has been well kept.

This unit is unsuitable for dealing with infectious diseases and should be discontinued for its present use, all patients being transferred to the Central Hospital at Kilwinning. It might be useful for care of the aged and infirm.

246. *Girvan I.D. Hospital.* This unit is under reconstruction as a war-time nursery, and has rightly been abandoned for the treatment of infectious diseases. It is quite unsuitable for the treatment of the sick.

247. *Davidshill I.D. Hospital, Dalry.* This is a brick built pavilion hospital of the usual rural type, and consists of an administrative block and two pavilions. The site is not large and is surrounded by agricultural ground. Some additions to the original buildings have been made, and there is accommodation for 22 beds. Facilities are out of date, and we consider that the hospital should be discontinued for its present use, but that it offers suitable accommodation for the care of the aged and infirm of the area.

248. *I.D. Hospital, Irvine.* This hospital has been abandoned for the treatment of fevers and is being reconstructed as a day nursery. This is a satisfactory arrangement, since the unit is not suitable for treatment of the sick.

249. *I.D. Hospital, Kilwinning,* was built in 1900, and has accommodation for 15 beds. The structure is good, and kitchen accommodation and equipment are adequate, so that it is suitable for the care of the aged and infirm or for conversion to a nursery. It will be abandoned for the treatment of fevers on the opening of the Central Hospital.

250. *Kyle Home, Ayr.* This institution is built of stone and follows the usual poorhouse design. It is not suitable for any purpose in connection with our survey. It is impossible to make any recommendation regarding its subsequent use.

251. *Cuninghame Home, Irvine.* This institution is well situated and stands in well-cared-for grounds. The hospital occupies a separate block and has accommodation for 106 beds. In addition there are wards for old people, etc., a mentally defective block, and an asylum block.

Although this unit fulfils a useful rôle at present in providing accommodation for the aged, it is unsuited for the treatment of the sick, and we do not recommend its use for this purpose.

252. *Crofthead Smallpox Hospital, Ayr.* This hospital, which has accommodation for 26 beds, is unsuitable for the treatment of patients suffering from infectious disease. It has served a useful purpose during the past six years as a centre for the surgical treatment of disorders of ear, nose, and throat. Nevertheless the nature of the buildings and the comparative remoteness of the site for short-stay cases lead us to suggest that it should be superseded as soon as circumstances permit. The buildings might be retained on a " care and maintenance " basis for use in the event of an outbreak of smallpox.

253. *Biggart Memorial Home, Prestwick.* This is a convalescent home of 120 beds for children. Sixty of these are used by Glasgow Corporation. We recommend its continuance for this purpose.

254. *Paisley Convalescent Home, West Kilbride.* This is a large convalescent home situated in a built-up area. It consists of two separate buildings connected by a covered space. The total accommodation is 100 beds.

The institution was built by Coats of Paisley in the interests of the work-people as a convalescent home, and for this purpose it is well suited. Although at present it is under the E.M.S., there are no real facilities for active treatment of patients, and we are of opinion that it should revert to its original function.

255. *Convalescent Home, Ochiltree,* is associated with Kilmarnock Infirmary. Not visited, and not included in the Survey as an institution for the sick.

256. *Rockvale Child Welfare Home, Saltcoats.* This institution deals with debilitated children up to four years. It has accommodation for 50, but at present only 16 are in residence. The building is rather exposed and not very satisfactory for its purpose. It is not suitable as an institution for the sick, and we have no recommendation to make.

REQUIREMENTS OF THE SUB-REGION

257. The survey of this region shows that the hospital accommodation in 1938 was deficient in both quantity and quality. Since that time two great improvements have been made: the opening of the Central Hospital at Kilwinning and the erection of the large emergency hospital at Ballochmyle. The latter, if taken over as a country general hospital, would serve both Kilmarnock and Ayr district hospitals and enable them to devote their attention largely to accident and emergency work, and to the care of out-patients, each reserving a relatively small section for cases of acute illness. With this scheme in operation the general hospital accommodation would be roughly as follows:

258. **General Accommodation**

Hospital.	Beds.	
	Present.	Recommended.
Kilmarnock Infirmary	155	100
Ayr County Hospital	86	50
Ayrshire Central Hospital	—	50
Ballochmyle	1268	900
Bute Cottage Hospital, Cumnock	13	12
Davidson Cottage Hospital, Girvan	14	14
	1536	1126

We have received details of a proposal for a new cottage hospital at Skelmorlie, to be provided by voluntary funds, and known as the "Skelmorlie Memorial Cottage Hospital," which would provide beds in addition to those above. This hospital is planned to provide 22 general beds, 3 maternity, and 6 children's cots. It appears to us that a cottage hospital is required to serve the local needs of Largs, Skelmorlie, and Wemyss Bay districts on account of their relative isolation from the main centres in Ayrshire. The direction of flow of patients from this area is towards Greenock.

A total of about 1150 general beds gives a proportion of approximately 3·9 per thousand of the population. A further 330 beds will probably be required to provide an adequate service for the county, but this extension should not be undertaken until it is found by experience how far the Glasgow hospitals are still used for general cases, especially from North Ayrshire. For this reason the arrangements recommended are considered sufficient for immediate purposes. If subsequent extensions are found necessary for general cases, these should be provided at the Ayrshire Central Hospital.

259. **The Aged and Infirm.** Provision for the aged and infirm, and the chronic sick is practically limited to Cuninghame Home, Irvine, and Kyle Home, Ayr—both originally poor law institutions below the standard of modern requirements and incapable of adaptation. For the aged and infirm it may be possible to make use of some of the smaller fever hospitals, etc., which are no longer required : such as Kilwinning Sanatorium (24), I.D. Hospital, Cumnock (20), and the I.D. Hospital, Dalry (22). With the simpler needs of the aged this arrangement might secure about 80 beds. This would be of some local value, but quite insufficient for the number in need, especially those in the larger towns. In order to maintain the principle of good local distribution one solution of the difficulty would be to concentrate all the accommodation for infectious disease on the Ayrshire Central Hospital, and use Heathfield I.D. Hospital, Ayr, and Kirklandside, Kilmarnock, for the aged and infirm, thus providing hostels exactly where they are required. There is a great advantage, as we have already indicated, in creating a single central hospital for infectious disease, whereas the distribution of the aged and infirm to their own localities is desirable on humane grounds.

260. **Tuberculosis.** On the recognised basis of two beds per annual death, about 250 beds would be required for the treatment of tuberculosis of the lung. The existing provision in suitable accommodation is 148 (88 in Glenafton and 60 in the Central Hospital at Kilwinning). It is recommended that accommodation should be increased in both these institutions, say, to 100 beds in each. The remainder should be found at Ballochmyle to form a chest unit in association with the country general hospital. Occupational and rehabilitation services should be developed at Glenafton, where accommodation would be limited to convalescents of both sexes.

261. **Maternity.** On a basis of 4·5 beds per 100 births, about 250 beds would be required. The present provision of a suitable character is about 150, making allowance for cottage hospitals and emergency beds. Further beds could be found by extension of the Kilmarnock Hospital to 50, the replacement of Seafield Hospital at Ayr by a new unit of 80 beds, and the provision (say) at Ardrossan of a home for normal cases similar to the useful institution at Buckreddan, Kilwinning.

262. **Infectious Diseases.** A formal enumeration of all the beds in the county that might be used for the treatment of infectious disease reaches the grand total of 594, whereas on the reasonable requirement of 1·5 beds per thousand of the population only 450 should be necessary. It is agreed, however, that the smaller units should be abandoned, leaving three larger hospitals with a combined total of 466 beds—Central Hospital, 276 ; Heathfield, 124 (of which 24 are at present used for tuberculosis) ; and Kirklandside, 66. If these hospitals are all retained for their present purpose, there should be exactly enough beds in the sub-region ; but if Heathfield and Kirklandside are diverted to the care of the aged and infirm, a further 174 beds would have to be provided at the Central Hospital. On a short-term programme the former solution is no doubt appropriate, but the long-term scheme of complete centralisation should receive full consideration.

263. **Non-pulmonary Tuberculosis and Orthopaedic Conditions.** There is no centrally situated orthopaedic hospital for the area, but orthopaedic cases may be treated either at St Andrew's Home, Millport, or at the Victoria Infirmary annexe at Philipshill, Busby. We recommend that children and adults suffering from non-pulmonary tuberculosis should in general be sent to Millport, and patients of any age suffering from non-tuberculous orthopaedic conditions to Philipshill, but that the convenience of patients should receive first consideration. If major surgical work is required, Philipshill is the place of

choice. It is essential that children suffering from "long-term" conditions should be sent to hospitals where there are educational facilities.

264. **Children's Diseases.** We do not recommend the provision of a special hospital for children, but we take the view that the country surroundings at Ballochmyle are specially suitable for the care of sick children, who should not be retained in town hospitals.

265. **Other Diseases.** There are no institutions in the county which could be regarded as "special hospitals," with the exception of a small unit near Ayr reserved temporarily for the treatment of ear, throat, and nose disorders of children. No special hospitals are necessary.

SUMMARY

266. **General.** For general hospital purposes this sub-region had, in the year under review, two voluntary hospitals of the district type and two small cottage hospitals, providing in all 268 beds for a population of nearly 300,000, and two poor law institutions with a total of 142 beds for the sick. Long before the war it had become clear that this accommodation was insufficient, and alternative schemes for extension and new building were under active consideration by both voluntary and local authority committees, when war broke out. It was equally clear that satisfactory extensions could not be made at either Kilmarnock or Ayr Infirmaries. The construction of the Department's hospital at Ballochmyle greatly altered the position by providing nearly a thousand general beds; so that the hospital position in this respect depends entirely upon whether this hospital can be used for the general sick of the county after the war, at least until a long-term scheme of general hospital construction is brought into operation. It might be fairly estimated that Ballochmyle should have a useful life of at least fifteen years; and alterations and extensions to bring it up to a peace-time standard ought not to be difficult.

267. The provision for maternity, fevers, and tuberculosis has improved considerably since the war by the opening of the new Central Hospital, and the lines of further development are now fairly clearly laid down. The only matter for anxious consideration is whether the fever hospitals at Kilmarnock and Ayr should continue to be used for this purpose or altered to make institutions for the aged and the infirm. We are impressed with the desirability of having a single fever hospital for an area of this size, and we feel that the needs of the aged and infirm have not hitherto received the consideration they deserve: that is, a well-built group of wards, preferably single storey for easy access to the open air, and situated at no great distance from the previous homes of the patients and their relatives.

268. **Buildings, Equipment, etc.** Apart from the new Central Hospital, the maternity hospital at Kilmarnock, and one or two smaller institutions, the hospital buildings in Ayrshire are generally out of date, or have been altered and extended in such a piecemeal fashion that their efficiency as units has been considerably reduced. On the whole, the equipment is modern and better than the buildings would suggest, like new wine in old bottles. In new hospital construction special consideration should be given to a simple and flexible design, so that alterations and extensions can be made without distortion or great expense, as the constant progress in medical science requires.

269. **Out-patient Departments, etc.** In the general hospitals out-patient departments are seriously deficient in size and their equipment cannot be put to the best use. It is essential that provision should be made on a generous scale for physio-therapy and the restoration of the disabled. As a rule X-ray

rooms and operating theatres are well designed and modern, but access to the former is not always satisfactory, and there is a tendency to rely on a single diagnostic room for all purposes.

270. **Special Services.** There is a deficiency in the provision of special departments and special services. Accommodation is usually cramped, and the same rooms are in constant use for conflicting purposes. Separate consulting room space is especially necessary for such subjects as psychiatry and genito-urinary disease. Clinics for diseases of the chest should be provided in connection with the out-patient departments of district hospitals, and orthopaedic clinics and fracture services should be similarly developed.

271. **Staff.** While we wish to pay high tribute to the work of the existing staff in the district hospitals, we feel that a regional scheme requires for its full development a greater " use in common " of specialist services, by the appointment of specialists on a sub-regional basis, to reside in the area and give their services to a group of hospitals.

DUMFRIES AND GALLOWAY SUB-REGION

272. This sub-region comprises the Counties of Dumfries, Kirkcudbright, and Wigtown, and the large burgh of Dumfries. The whole area has an estimated population (1938) of 141,900, and the only centre of population is the town of Dumfries (23,797), which is geographically situated towards the eastern end of the sub-region, but is the best road and rail junction in the area. Dumfriesshire (81,818) has a considerable aggregation of population in the south, especially between Dumfries and the Border ; but by far the greater part of the county is rural, with poor communications and a scattered population. There is no single centre for major hospital services, but Glasgow is rather more accessible for patients than Edinburgh. The inhabitants of Eskdale and Liddesdale look to Carlisle as their district hospital and to Edinburgh for the more highly specialised services.

273. Kirkcudbright (30,359) is largely agricultural, with no town of sufficient size to form a hospital centre. Dumfries, however, lies on its eastern border and has relatively good communications by road and rail with the more populous parts of the Stewartry. In fact Dumfriesshire and Kirkcudbright, taken together, form a convenient area with Dumfries as the geographical centre.

274. Wigtownshire (29,723) is almost equally remote from Ayr and Dumfries, but the latter is more generally regarded as the district hospital centre. Glasgow is the centre for major services. There is no need to lay down any hard and fast rule, as access to Ayr or Dumfries should be made equally easy, and will depend on the patient's choice.

275. The hospital provision in this sub-region, according to the 1938 figures, was defective in both quantity and quality, except perhaps for infectious disease, in which the gross number of beds was sufficient. Since that date the principal changes have been the opening of an isolation hospital of 39 beds in Kirkcudbright to replace a 32-bed fever hospital which has been converted into a sick bay for evacuated children ; and the provision by the Department of Health of two emergency pavilions at Dumfries Royal Infirmary—an addition of a nominal 84 beds.

276. The amount and disposition of hospital accommodation in the sub-region is as follows :

Type.	Hospital.	Beds.	
General	Dumfries and Galloway Royal	170	
	Moffat Cottage Hospital	12	
	Kirkcudbright and District Cottage Hospital	16	
	Castle Douglas and District Hospital	32	
	The Grove	74	
	Garrick Cottage, Stranraer	32	
	Thomas Hope Hospital, Langholm	14	
		—	350
Tuberculosis, Pulmonary	Lochmaben Sanatorium	—	132
Maternity	Charnwood Maternity Hospital	10	
	Cresswell, Dumfries	56	
		—	66
Infectious Diseases	Annan I.D.	26	
	Lochmaben I.D.	35	
	Thornhill I.D.	27	
	Parkhead I.D.	30	
	Laurieston Hall	39	
	Newton Stewart I.D.	32	
	Newton Stewart Smallpox	4	
	Castle Douglas I.D.	32	
	Clenoch, Stranraer	41	
	I.D. Langholm	20	
		—	286
Poor Law	Wigtownshire Home, Stranraer	22	
	Rowantree P.L. Institution, Thornhill	52	
	Burnside House P.L. Institution, Kirkcudbright	28	
		—	102

The following is a brief description of the hospitals :

277. *Dumfries and Galloway Royal Infirmary* consists of a two-storey red sandstone building comprising 13 wards and having accommodation, including two E.M.S. huts, for 170 beds. Various additions have been made to the original buildings.

The general design of the wards no longer satisfies modern requirements for medical care, and the various annexes are cramped and deficient in services. Practically all the units are too small, and the out-patient department is particularly congested.

In our opinion this hospital cannot be re-designed to make even a reasonably satisfactory unit for dealing with acute medical and surgical cases. It would require to be taken down and rebuilt. This being so we feel that the present site is not satisfactory, and that the best plan would be to build a new hospital at a convenient distance from Dumfries and re-design the present institution as a hospital for the chronic sick and the infirm. If, as we suggest elsewhere as a possibility, a new hospital near Dumfries might be built for infectious disease and diseases of the chest, including tuberculosis, it would be eminently desirable to have the entire group on a single site.

278. *The Grove Hospital* is a large stone-built mansion some four miles from Dumfries, with good ward and sanitary accommodation. Unfortunately it is somewhat inaccessible for general county purposes, and there is hardly sufficient building land to permit the transfer of the main hospital to that site. We recommend that the Grove should be retained as a convalescent home for the main hospital.

279. *Moffat Cottage Hospital* is a small, well-designed cottage hospital in a pleasant situation, although there is little room for extension. Accommodation amounts to 12 beds, and there is a small maternity section with a separate

labour room. The operating room is well equipped. This unit is quite suitable to be retained as a hospital of the cottage type.

280. *Kirkcudbright and District Cottage Hospital* was originally a school. The buildings are congested on the site and rather gloomy. Accommodation amounts to 16 beds, but facilities are poor. X-ray work is done by matron. Operating room is quite inadequate and unsuitable.

We recommend that this institution should be discontinued as a hospital. It might, however, serve a useful purpose as a sick bay or group practice centre.

281. *Castle Douglas Cottage Hospital.* Additions have been made to the original building, and there is now no further room for expansion. Accommodation amounts to 32 beds, and sanitary annexes are adequate. The operating room is rather small, but fittings and equipment are modern, and there is a sterilising room adjoining. The X-ray department is adequate for a hospital of this size. Kitchen facilities and accommodation are good.

As a hospital this unit is incapable of extension or adaptation, but facilities are fair, and the hospital compares favourably with others of the district. We recommend it as suitable to be retained as a cottage type unit or else as a sick bay for the practitioners of the district.

282. *Garrick Cottage Hospital, Stranraer,* was built in 1897, and had additions made in 1935. The site is now fully built up. The theatre and X-ray apparatus are inadequate as to space and facilities at present.

The hospital may be either retained as a small cottage hospital or rebuilt as a larger unit more suitable for the area. We recommend that it be retained as a home hospital, and that major medical and surgical cases should be sent to one of the larger district hospitals at Dumfries or to the Ayr group of hospitals, according to the scheme as finally worked out for the region.

283. *Thomas Hope Hospital, Langholm,* is a substantially built cottage hospital in the middle of Langholm. The site is full and there is no room for extension. The operating room is small, but facilities are good. The surgical work of this hospital is associated with Carlisle.

This cottage hospital should be retained as a " general practitioner " hospital for its area. Its natural link is with the Cumberland Infirmary, Carlisle, to which all major surgical and medical cases should be transferred, except in emergency. No extensions should be contemplated, except possibly a few beds and a labour room for normal maternity cases.

284. *Lochmaben Sanatorium and Fever Hospital.* This large combined hospital has a fine upland site with ample room for expansion. The surrounding land is sloping, but appears to be suitable for building. The total accommodation is 132 beds for tuberculosis and 35 for infectious disease. The two units are under a single administration, but are physically separable, each having its own quarters for nurses and maids.

The sanatorium section consists of pavilions of " temporary " structure functionally useful, but not very well arranged. The wards are below modern standards of convenience and services, and, on the whole, are in an indifferent state of repair and decoration. This section has a small operating room attached to one of the pavilions. Under war-time conditions it has not been possible to maintain the buildings in conformity with hospital standards, but apart from this, replacement of many of the present buildings will be necessary if the hospital is to be retained on its existing site. A new, well-arranged administrative block is essential, and the staff quarters require extensive improvements. In other words, if this hospital is to be retained, it should be considered as a whole, and a completely new layout plan prepared by a hospital architect.

The fever section of the hospital follows the usual design of its period. The main buildings are of brick, with administrative offices, nurses' quarters, kitchen, discharge block, etc., under one roof. The pavilions, whether of brick

or of " corrugated iron," are out of date in construction and services. The buildings of the fever section, although more substantial, are functionally more obsolete than those of the sanatorium.

285. Considering the combined hospital as a whole, we are of opinion that it could be made to serve, temporarily at least, as a centre for tuberculosis for the sub-region, and for infectious disease for the eastern part of the sub-region (leaving Laurieston Hall to take care of the western part). If we were to make this as a definitive recommendation, however, it would involve not merely the addition and reconditioning of buildings, it would require complete reconstruction with a new layout. We consider that Lochmaben is an excellent site for a hospital of the " country " type, but unfortunately it is too far to the east to serve the sub-region conveniently. We feel, too, that the expense of reconstruction should lead the authorities to consider the selection of a new site for a country hospital, nearer the main centre of population. Such a hospital would provide, for the whole sub-region, medical care for (*a*) tuberculosis and other disorders of the chest, (*b*) infectious disease, (*c*) maternity, and (*d*) general medical and surgical conditions, including care of the chronic sick. If this were approved, the Lochmaben Hospital would render its best service as a sanatorium for convalescent cases of tuberculosis.

286. *Charnwood Maternity Hospital* was installed in a stone built villa in 1922. It consists of three wards and one nursery. The labour room and anaesthetic rooms are situated in the new wing. The whole makes up a fairly good unit, but is too small to be satisfactory.

We recommend that this hospital should be closed, all maternity work being sent to Cresswell until a new hospital is built. Alternatively, this unit might be of use for dealing with normal cases in a district scheme, but only as an annexe of a principal hospital.

287. *Cresswell Counties Maternity Hospital* was converted from Rosevale Poor Law Institution. It has the faults of a converted poorhouse as well as the benefits of clever design for its present purpose. The site is good and capable of development. Accommodation amounts to 56 beds and equipment is modern and adequate.

We recommend that this hospital should continue to serve the county until it is replaced by a new institution, as it is essential to have an obstetric centre in this area.

When a new maternity hospital is built, the future of Cresswell will depend on what is done with the existing Dumfries and Galloway Royal Infirmary ; if the latter is used for the infirm, we recommend that Cresswell should be abandoned, as it is fundamentally unsuitable for the treatment of the sick.

288. *Annan I.D. Hospital* is a typical small isolation hospital. Its construction is not adaptable as a cottage hospital when it is discontinued for the treatment of fevers. Accommodation amounts to 26 beds, but there is considerable difficulties in obtaining staff.

This unit might be suitable for the treatment of the aged and infirm, but should be discontinued for fevers.

289. *Thornhill I.D. Hospital.* This little rural fever hospital is built of stone, and is pleasantly situated. The standard bed accommodation is 24 in two ward blocks. There is also an administrative block which contains the nurses' quarters.

We recommend that the building would be useful for housing aged and infirm in place of Rowantree Poor Law Institution, but it should be discontinued for fevers.

290. *Parkhead I.D. Hospital, Dumfries,* is laid out on the pavilion system and is built of brick and roughcast. The site is built up, and although there is agricultural ground adjoining, it is not level. Accommodation amounts to

30 beds, but facilities are not good. The admission block contains the nurses' quarters. There is no residential medical staff.

As a unit this hospital is small and uneconomic, and as such should be discontinued, although it might be useful for the treatment of the aged and infirm of the area.

291. *Laurieston Hall* was transformed from a private house, and in spite of apparent difficulty of securing isolation there has been no cross infection since it was opened in October, 1940. Accommodation amounts to 39 beds. It is at present too small to be an economic unit.

The situation of this unit makes it suitable for a central fever hospital for Galloway. If Laurieston Hall is to be retained for infectious diseases, the present hospital should be used as an administrative building and nurses' home, the wards being added as pavilions. This recommendation, however, is dependent upon the findings of a general review of the accommodation for infectious disease in Dumfries and Galloway. It assumes that two fever hospitals should be created, one near Dumfries for the Eastern Area, and the other for the West, including Wigtownshire. If this scheme is approved, we think that Laurieston Hall, enlarged as suggested above, would serve for the Western Area.

292. *Newton Stewart I.D. Hospital* is of the "Speirsesque" type and is considered along with the smallpox hospital which is situated 150 yards away. Some additions have been made to the original building, the system being two ward blocks connected to the administrative block by closed corridors. There is a good boiler and central heating throughout the hospital. Hot water is abundant, but otherwise the facilities are poor.

This institution is unsuitable for the treatment of the sick; fever cases in this area should be admitted to Laurieston Hall or a central hospital for the sub-region. The existing buildings might be adapted as a youth hostel.

293. *Castle Douglas I.D. Hospital.* This little unit was closed as a fever hospital on the opening of Laurieston Hall in 1940. The situation is pleasant, but there is no extra ground available for expansion. The buildings consist of a central administrative block and two isolation blocks, and a separate laundry block. Facilities are fair.

This unit is in use at present as a sick bay for evacuated children and as such serves a useful purpose. It may continue to do so, but it is of no value as a hospital.

294. *Eskdale Isolation Hospital, Langholm.* This rural unit is not in use, nor is it likely to be re-opened as a hospital. Accommodation amounts to 20 beds.

295. *Clenoch I.D. Hospital, Stranraer.* The original hospital is now the administrative block, and it alone has electric light. The wards have gas only. A nurse must sleep in each block where there are patients as there is no one on night duty. The wards are somewhat dilapidated and neglected, and there is no central heating anywhere. There are no facilities for operations and disinfection is carried out in the poorhouse (over the wall) by arrangement. Accommodation amounts to 41 beds.

The survey shows that this hospital is poorly constructed and the facilities inadequate, and we recommend that it be abandoned for its present use. The buildings, if reconditioned, might be useful for the treatment of the aged and infirm from the neighbouring institution.

296. *Wigtownshire Home, Stranraer,* has not undergone any appreciable change since it was built about 1850. The building is worn out and dreary, without proper sanitary accommodation or heating. The accommodation amounts to 22 beds. The sick wards are quite unsuitable. At one time there was a proposal to add a hut for the chronic sick at Clenoch I.D. hospital (over the wall), but this never bore fruit.

This is a very poor place, and is quite unsuitable for housing the sick or aged, or indeed for any other purpose.

297. *Rowantree Poor Law Institution, Thornhill.* In this institution there is no separate or separable accommodation for the sick, the sick wards being inextricably mixed up with the general accommodation (52 beds). This unit is very inaccessible and quite unsuitable for the treatment of the sick.

298. *Burnside House Poor Law Institution* dates from 1851, and is typical of its period ; there has been little change in it since that period. Accommodation amounts to 28 beds.

It is quite unsuitable for the housing and treatment of the sick, and is no place for the aged. It should be abandoned.

REQUIREMENTS OF THE SUB-REGION

299. The survey of the Dumfries and Galloway Sub-region reveals deficiencies in all types of hospital accommodation. Moreover, the buildings generally are out of date and it is not possible to bring them up to modern standards. Actual shortage of beds is evident in the general and maternity categories, and in the provision for the chronic sick. For tuberculosis and infectious disease the *nominal* bed accommodation is sufficient, but the institutions are defective in structure and services.

300. **General Hospital Accommodation.** The only general hospital large enough to qualify as a district hospital is the Dumfries and Galloway Royal Infirmary. This long-established voluntary institution has, on its central site in the town of Dumfries, a normal complement of 110 beds. To these two emergency pavilions have been added by the Department of Health, with a war-time assessment of 84 beds (60 in peace-time). The Grove Auxiliary Hospital is regarded as an integral part of the Infirmary, but it is situated some four miles away, and is therefore outside our immediate consideration of the main hospital *as a building*. The latter is out of date as a structure, and in our opinion it could not be reconstructed to make a satisfactory hospital for acute cases. If the site were extensive and otherwise suitable, we might have recommended that a new hospital should replace the old buildings in planned stages ; but the site is cramped and unsatisfactory, and the levels and approaches are difficult. In these circumstances we strongly recommend the erection of a new hospital on another site, preferably on the outskirts of Dumfries, to serve as a district hospital for the whole sub-region, and to combine the advantages of a country hospital with convenient access to the town.

In examining possible sites for the new hospital, which we recommend, we first gave careful consideration to the Grove Hospital, but were soon convinced that a new building on this site would have disadvantages as great as those of the present Infirmary without any compensating advantages : it is rather difficult of access along a narrow road, and its area is limited, with awkward levels for building. Our recommendation therefore is that a new hospital should be erected in the neighbourhood of Dumfries to serve the needs of the acute and chronic sick, and to provide for all but the major hospital services, which will be dealt with at the regional centre in Glasgow. The new hospital should include a wing for diseases of the chest, in collaboration with the sanatorium, and we assume that a maternity hospital will ultimately be built in the same grounds. We suggest also that, if provision for the treatment of infectious disease is centralised, the hospital should be in the same grounds. The site selected should therefore be extensive, so as to provide ample space for future developments. The accommodation required for general in-patients, including the chronic sick, would be approximately 600 beds (taking the admittedly low rate of four beds per thousand of the population).

301. **The Aged and Infirm.** The existing provision for the aged and infirm

and the chronic sick is 102 beds, distributed among three poor law institutions—Kirkcudbright, Thornhill, and Stranraer. We have already stated our view that none of these institutions is suitable for the care of the sick, and we have suggested that some of the smaller fever hospitals might possibly be converted into hostels for the aged and infirm. It is possible also that part of the existing Royal Infirmary could be adapted for this purpose, the remainder forming a good casualty and accident section, with ample out-patient facilities and a physio-therapy department. This combination might leave about a hundred beds as hostel accommodation for the infirm. The arrangement is in agreement with the general principle that the aged and infirm should be housed as far as possible near their own homes.

302. **Tuberculosis.** Lochmaben Sanatorium is admirably situated to serve as a sanatorium for the whole sub-region. The site is open and healthy, and yet not too remote, and there is room for carefully planned development. The existing figure of bed accommodation (132) is sufficient for the needs of the whole sub-region, but most of the buildings are worn out and should be gradually replaced. The administrative department especially requires structural reorganisation, and the whole site requires careful planning for a long-term scheme of development.

There is no special provision in the sub-region for the treatment of non-pulmonary tuberculosis or non-tuberculous crippling diseases. Recently an approach has been made to the Victoria Infirmary, Glasgow, for the provision of clinic facilities in association with the orthopaedic hospital at Philipshill. We favour a development on these lines and recommend that Philipshill Hospital (para. 123) be regarded as the central orthopaedic hospital for the sub-region, providing clinics at Dumfries, Lochmaben, Castle Douglas, and Stranraer.

303. **Infectious Disease.** The number of beds in the sub-region is nominally sufficient, but in fact all the hospitals (except Laurieston Hall) are out of date in structure and services, and all are too small to be economic units or to permit the treatment of infectious disease in accordance with modern standards. There are three main possibilities for development : the first is to combine a central fever hospital with Lochmaben Sanatorium ; the second, to have two hospitals together providing the necessary number of beds (which we estimate at about 215). This might be achieved by the use of Lochmaben for the Eastern area and Laurieston Hall for the West ; and the third, to erect a new fever hospital on the grounds of the new district general hospital which we propose should be built on the outskirts of Dumfries.

In considering these alternatives one should clearly understand that financially there is little to choose between them. In every case completely new ward buildings are necessary, and only Lochmaben and Laurieston Hall provide even the nucleus of administrative quarters, the adaptation of which would involve considerable expense. It is also clear that the smaller units, at Annan, Thornhill, Parkhead, Newton Stewart, Stranraer, Castle Douglas, and Langholm must be given up for the treatment of infectious disease ; and that any enlargement of Laurieston Hall would mean that the house could only be used for administration, involving the construction of sick wards in the grounds. On the whole we feel that the best plan would be to construct a new central hospital of 200-220 beds in the same grounds as the new general district hospital which we have already proposed. This would provide a fine combined administrative unit close to the main centre of population, with a total figure of 900 beds (general 600, fever 200, and maternity 100). A hospital of this size would require at least 50 acres of ground, and preferably 100.

304. **Maternity.** The Cresswell Maternity Hospital represents a very ingenious adaptation of the old Rosevale Poor Law Institution, rendering excellent service as a temporary scheme. The only other accommodation in

the sub-region, apart from occasional beds in cottage hospitals, is the Charnwood Maternity Hospital belonging to the Burgh of Dumfries. This skilfully adapted private house has 10 beds.

While paying tribute to the excellent service rendered by these two institutions, we could not recommend their continuance beyond the emergency period. The Charnwood home might continue to be used for normal cases in close collaboration with a new hospital, but the Cresswell hospital has no place in a long-term scheme of development. We recommend that a new hospital of 100 beds be erected near Dumfries, preferably in the grounds of the proposed general hospital; this new unit would deal with all abnormal cases from the sub-region and with a considerable proportion of normal cases also. The remainder of the 120 beds required for the area could be distributed among the cottage hospitals, including the Charnwood Home.

SUMMARY

305. The Dumfries and Galloway Sub-region is seriously deficient in hospital accommodation of all types, and in our opinion the only right policy is to build a new combined district hospital near Dumfries, to deal with general cases, including chest diseases and other specialties appropriate for district hospitals; maternity; and infectious diseases. The cottage hospitals at Moffat, Castle Douglas, Langholm, and Stranraer should be continued and extended to provide a few beds for normal maternity, and "The Grove" should be retained as a convalescent home for the new hospital.

306. The new general hospital should provide facilities for the treatment of acute diseases of the chest and act as a clearing house for surgical tuberculosis and orthopaedic cases generally, with the orthopaedic hospital at Philipshill, near Busby, as the central orthopaedic hospital for the sub-region. The Lochmaben sanatorium should become the central sanatorium for the whole sub-region, for the treatment of pulmonary tuberculosis and non-surgical tuberculous conditions not requiring active surgical treatment. It should develop education, occupational training, and measures of rehabilitation.

307. Infectious disease should be dealt with either by the erection of a new hospital in the grounds of the proposed central general hospital, or by separate development of fever units at Lochmaben and Laurieston Hall. We prefer the former, as the total accommodation required is only about 200 beds, which means that the separate units would each be too small for economic management. In any case we are strongly in favour of the association of fever units with general hospitals of the district type.

308. For maternity we recommend as a long-term programme the construction of a new hospital of 100 beds near Dumfries. Until this programme can be carried out, we suggest that Cresswell and Charnwood be continued, with a few beds for normal cases at each of the cottage hospitals.

309. Provision for the aged and infirm might be made in the existing buildings of Dumfries and Galloway Royal Infirmary, together with some of the small fever hospitals given up under the new scheme for the treatment of infectious disease.

310. A very considerable extension and improvement of out-patient facilities is essential, especially in Dumfries, and a corresponding development of special services such as gynaecology, genito-urinary disease, orthopaedics, and other specialties. A central laboratory for this sub-region would be a great advantage; it could be included in the proposed new hospital at Dumfries, but should in any case be linked closely with a hospital.

311. The staff of the sub-region needs to be further strengthened by the appointment of physicians, surgeons, and other specialists as required, with

their headquarters at Dumfries. The need for certain full-time appointments, with supervisory functions in the smaller hospitals, is already apparent.

312. The position of certain parishes in the Border area requires special consideration. The inhabitants of Eskdale and Liddesdale and some neighbouring areas rely on Carlisle for their district hospital services, especially in the areas where the only rail connection with Dumfries is through Carlisle. We think that the following parishes should be included in this Border area, which contains one cottage hospital—the Thomas Hope Hospital, Langholm:

Gretna Parish	2859
Dornock	1688
Canonbie	1498
Halfmorton	274
Kirkpatrick Fleming	1069
Langholm	2770
Tundergarth	321
Westerkirk	372
Middlebie	1440
Hoddom	1242
	13,533

Needless to say, there would be no limitation on the patient's choice of hospital service, and some persons living as far west as Annan may prefer Carlisle to Dumfries. If our recommendation that a new district hospital centre be set up at Dumfries be accepted, we feel that the great majority of the population of Dumfriesshire will rely on their own county for district hospital services.

DUNBARTONSHIRE SUB-REGION

313. The population of the county is estimated at 155,243 in the Report of the Registrar-General for 1938. As explained, however, in an earlier part of this Report, a considerable part of the county will naturally look towards Glasgow for its hospital services. The Burgh of Clydebank and the populous parts of New Kilpatrick Parish are so close to Glasgow that it is not to be expected that residents would turn to a central county institution to which access would be more difficult. At present, apart from small cottage hospitals, small fever hospitals, and one poor law institution, there are no hospital facilities within the county. The detached portion of the county would also look towards Glasgow, although a portion at the eastern end may rely on Falkirk for services. The most populous area of the county lies along the north side of the River Clyde and along the Leven valley. The remainder of the county is either agricultural or upland, with the exception of a few residential districts, and extends in a narrow strip to beyond the head of Loch Lomond.

314. The hospital provision in the county is meagre in extent and generally not of a high order. There are 77 beds in cottage hospitals and 78 in Townend Hospital, Dumbarton, which is a joint poor law institution. The total of general hospital beds is thus only 155. In addition there are situated within the geographical area of the county, Canniesburn Annexe to Glasgow Royal Infirmary, the Schaw Convalescent Home, Bearsden, and the Royal Hospital for Sick Children Country Branch, Drumchapel, but these are essentially Glasgow institutions and are included in the Glasgow Sub-region. Infectious diseases accommodation amounts to 311 beds, including Blawarthill Hospital (60 beds), which belongs to Clydebank Burgh and is situated within the boundary of the City of Glasgow. Several wards of these infectious diseases beds are used for the treatment of tuberculosis, but otherwise there is no accommodation in the county for this disease except in Lanfine Home, where the accommodation is nearly all taken up by cases from the City of Glasgow. There is no maternity accommodation in the county apart from one or two beds in Townend Hospital. Thus most of the general and maternity cases

are treated in the Glasgow hospitals and will, of course, have to continue to be so treated unless accommodation is provided in the county. In 1938, 2963 general hospital cases, 483 maternity cases, and 1026 special hospital cases were sent to Glasgow.

315. It is clear from the foregoing that the county is in no position at present to provide comprehensive hospital services. Also, a large proportion of the population especially in parts adjacent to the City of Glasgow, would probably continue because of their geographical situation to look to Glasgow for their principal hospital services, even although sub-regional services were organised in the county. We estimate that if Clydebank, New Kilpatrick, and the detached portion of the county continued to send cases to Glasgow, the remaining population would only amount to about 80,000, a figure which is almost too small to support a sub-regional hospital service. Nevertheless, in our view it will be desirable at some time to provide a district hospital in the vicinity of Dumbarton or the Vale of Leven, and also institutional facilities for maternity. A central infectious diseases hospital, possibly within the same grounds as the general hospital, would also be desirable. The general hospital proposed would provide for both acute and chronic cases, and in size might extend to 400-500 beds.

316. The following is a table of the hospital accommodation in Dunbartonshire:

Type.	Hospital.	Beds.	
General	Canniesburn Hospital	—	
	Schaw Home, Bearsden	—	
	Henry Brock Vale of Leven Cottage Hospital, Alexandria	26	
	Victoria Infirmary, Helensburgh	25	
	Royal Hospital for Sick Children, Drumchapel	—	
	Dumbarton Cottage Hospital	26	
		—	77
Maternity	Nil. (" Braeholm " in Helensburgh being converted for 20 beds.)		
Infectious Diseases	Westerton of Mugdock I.D. Hospital	36	
	I.D. Hospital, Duntocher	24	
	I.D. Hospital, Helensburgh	38	
	Blawarthill I.D. Hospital	60	
	Lennox I.D. Hospital	45	
	I.D. Hospital, Dumbarton	50	
	Camis Eskan	58	
		—	311
Poor Law	Townend Hospital, Dumbarton	78	
Miscellaneous	Lanfine Home	32	
	Broomhill Home	159	
		—	191

The following is a brief description of the hospitals in the county:

317. *The Henry Brock Vale of Leven Cottage Hospital, Alexandria*, is situated in an old mansion-house which has been converted. A brick and roughcast wing has been added, together with a sanitary tower. The total number of beds is 26, and these are nearly all on the first floor, which is perhaps not an advantage. There is a well-equipped operating theatre and an X-ray room with a portable X-ray set. The out-patient department, which is new, is connected by corridor to the main building, and although small, is suitable for its purpose. The site is open and secluded from the main road, so that additional buildings could be erected.

We find that there is good co-operation between the general practitioners and the visiting surgeon, who comes from the Western Infirmary, Glasgow, and that extensive use is made of this little hospital. It would also make an excellent centre for group practice and for health centre activities.

318. *Victoria Infirmary, Helensburgh,* is a typical design of cottage hospital with two wards, one in each wing. The hospital was built in 1897. It is constructed of red and white sandstone. Recently a new modern nurses' home of seven bedrooms has been added. The total accommodation for patients is 25 beds, including on the first floor four single private rooms. There is a good operating theatre. The X-ray plant consists of a small portable unit. Out-patient consultations do not appear to form a large part of the work. The staff is formed from general practitioners in Helensburgh, and a surgeon from the Royal Infirmary, Glasgow, is available for consultation.

In a regional scheme this hospital would obviously be linked with the Western Infirmary. If, however, a new district hospital for Dunbartonshire is built, this hospital would then be one of its home hospital units. The site is ample, but there is not much room for extension. Helensburgh Infectious Diseases Hospital is nearby, and possibly the site of that might also be incorporated in the unit.

319. *Cottage Hospital, Braehead, Dumbarton,* is a cottage hospital of typical design. The total accommodation is for 26 patients. The site is rather cramped and steep. There is the usual operating theatre, with equipment, and an X-ray room provided with a portable X-ray unit. Local practitioners attend their own patients and take tours of duty of one year for emergencies. A consultant surgeon is available from Glasgow.

It is our hope that a new district hospital will be erected for Dunbartonshire, perhaps near Dumbarton or between that town and Clydebank. In that event, we think this hospital should be closed or used in a comprehensive medical service as a local health centre. We do not think it should continue to be used for major surgical work.

320. *Blawarthill I. D. Hospital* is said to have 120 beds and cots, but on an adequate space basis 60 would be a more appropriate figure. It is situated at Holehouse Drive within the City of Glasgow, and occupies a flat site now in a fully built-up area. The original part of the hospital was built about 1897 and extensions made in 1904. There is an administrative block of two storeys, five pavilions for patients, garage, laundry, and boiler-house. The hospital is structurally substantial, but appears to require a good deal of repair.

One of the five pavilions was adapted as a gas cleansing centre and recreation room for Civil Defence staff. Another contains the E.M.S. theatre and X-ray room—with portable Victor X-ray unit.

This fever hospital is of the usual design of its period, and is now, on account of its small size and moderate equipment, not in conformity with the modern conception of a hospital for the treatment of infectious disease. We understand that the Local Authority intend to give it up as a hospital for infectious disease as soon as alternative accommodation can be found, and with this we concur. The institution might be reconstructed as a home for the aged and infirm.

321. *Lennox I.D. Hospital, Milton of Campsie,* nominally carries 60 beds, but on an optimum standard probably 45 would be a better figure. It occupies about five acres of sloping ground in open country. There are three pavilions for patients. Pavilions 1 and 2 are on the usual small fever hospital plan, but to Pavilion 1 there has been added a projection backwards in the form of a verandah containing six beds, and also a recreation room and verandah have been added at one end. Pavilion 3 is built on sanatorium lines, and consists of five cubicles entering from a verandah. There is a wash basin at the entrance to each cubicle. Two of the pavilions are occupied by cases of pulmonary tuberculosis. The administrative block contains the matron's, nurses', and maids' quarters, kitchen, and stores. The wards are independently heated, the boiler-house being entirely required for the laundry.

This is a typical example of a small infectious diseases hospital—too small

to be truly efficient. The medical attendant is a local general practitioner, but there is no facility for the proper treatment and examination of tuberculosis cases. We suggest that this hospital should be ultimately discontinued for its present purpose and diverted to the care of aged and infirm cases or a children's home or for some other purpose.

322. *I.D. Hospital, Helensburgh,* is a two-storey building dating from 1875. There is also a small wood and corrugated iron pavilion situated apart. There are 38 beds in all, including 12 in the phthisis pavilion. The fever accommodation is distributed in small wards on the ground and first floors of the main building. The staff bedrooms are also on the same floors. The doctor in charge is a retired practitioner.

This institution is old and out of date in almost every respect. The accommodation both for patients and staff is not in accordance with modern standards, and the hospital should be abandoned as soon as other accommodation becomes available.

323. *Joint I.D. Hospital, Dumbarton,* occupies a favourable site above the Cardross Road. There is no spare ground within the site, but plenty of agricultural ground surrounding. The institution consists of administrative block, garage, gate-house, and three pavilions for patients. The total accommodation is stated to be 80 beds, but we suggest that an appropriate figure with adequate spacing would be 50. The pavilions are of the usual design, consisting of wards in each wing and central duty rooms and kitchens. The ward annexes are minimal or inadequate. Heating is by coal stoves in the centre of the wards. There is no electric light. The doctor in charge is a local practitioner. The institution is a training school for the fever certificate.

In general, this hospital may be described as out of date and lacking many essential features. In our view it should be abandoned and a new fever unit provided for the joint purposes of the whole county.

324. *I.D. Hospital, Duntocher,* is a small infectious diseases hospital of 24 beds, which was opened in 1907. It consists of an administrative block, three pavilions, one of which is very small, laundry, and boiler-house, all built of red sandstone. The site is open, and we understand that at one time consideration was given to further development of the County's hospital services at this point. We believe, however, that it would be more suitable to locate any new hospital services in the central part of the county.

This hospital is too small to be an effective unit, and we consider that it should be abandoned for the treatment of infectious diseases and devoted to some other purpose such as the care of the aged and infirm.

325. *Westerton of Mugdock I.D. Hospital.* This building, originally a private mansion-house, was prior to the war a convalescent home for young children, established under a private trust. During the war it has been taken over by the County for the treatment of infectious diseases. The total accommodation for patients is 36, but this represents an overcrowded standard.

The house is in good order, but in our view is unsuitable for permanent occupancy as a fever hospital, and should revert to its original purpose as a children's home.*

326. *Broomhill Home,* built originally as a private mansion-house (*circa* 1876), is a voluntary institution run by a Board of Directors for the care of selected incurable cases, such as rheumatoid arthritis, paralysis, and congenital deformities. It does not treat many of the groups included under the term " chronic sick," as understood in this report. For example, progressive conditions like cancer, cardiac disease, and chronic bronchitis are not admitted. Some of the patients are almost completely helpless, while others are to some extent able to look after themselves.

* We understand that Westerton of Mugdock has now been given up by the County.

The accommodation for patients—159 beds—is generally of good quality for its purpose, and there are satisfactory amenities. The site is 11–14 acres, very low-lying, except where the house stands. Admission is by application to the Admissions Committee, which is appointed by the Board of Directors. Patients come from Glasgow and adjacent counties.

We think that this institution should continue for its present purpose.

327. *Lanfine Home* is a separate building in the same grounds as Broomhill and under the same management and administration. It is used for the treatment of cases of pulmonary tuberculosis. It consists of a brick and roughcast building on an uneven site. There are two male wards of 8 beds, and two female wards of 8 beds, 32 beds in all with a balcony capable of taking 8 beds. The accommodation generally is good, but there is no special equipment for the treatment of pulmonary tuberculosis and no X-ray apparatus. A local practitioner visits the hospital. Patients are mostly received from Glasgow through the Glasgow Corporation Tuberculosis Service.

We think that this institution should be diverted from the treatment of tuberculosis and devoted to the reception of similar cases to those sent to Broomhill (para. 326).

328. *Townend Hospital, Dumbarton,* is a poor law institution of traditional design. The poorhouse accommodation is 186 beds and the hospital accommodation 78. The hospital is in a separate building situated behind the main body of the institution. In some of the wards there is a certain degree of overcrowding, but on the whole the accommodation is fairly good for the type of institution. Some equipment has been provided by the Department of Health for Scotland under the E.M.S. Scheme. There is an operating theatre with sterilising apparatus. The site of the hospital is open, but the ground falls away immediately behind. It is situated on the outskirts of Dumbarton, to the north. The doctor in charge is a local general practitioner, and a consulting surgeon from Glasgow is available. Occasional accidents and emergencies are admitted.

We consider the hospital section of this institution quite suitable for the treatment of the aged and infirm or chronic cases, but only as a temporary measure. Its ultimate disposal may depend upon the decision whether or not to establish a new general hospital in Dunbartonshire.

More Recent Additional Institutional Provision in Dunbartonshire

329. *Camis Eskan, Craigendoran,* is a mansion-house situated in a pleasant estate, which was requisitioned by the Department of Health for Scotland at the beginning of the war. It has since been occupied by Dunbarton County Council as an infectious diseases hospital, and there are at present in it 58 beds.

We were informed that the County Authorities were contemplating using the building ultimately as a tuberculosis hospital of 30 beds, with the possibility of the addition of new pavilions. Although the site is favourable, we are of opinion that small units for tuberculosis cases or for infectious cases are not in accordance with our general suggestions, and that Camis Eskan could be devoted to other purposes.

330. *Cardross Park Home* is a mansion-house at Cardross, which has been taken over by the County as a home for ailing children or for children whose parents are temporarily unable to look after them.

331. *" Braeholm," Helensburgh,* is a house in Helensburgh, which at present is being converted into a maternity home of 20 beds.

332. *Dunbartonshire Public Health Clinics.* There are three clinics in the County, at each of which 10 beds are available for short-term cases, such as tonsillectomy operations. These clinics are situated at Kirkintilloch, Dumbarton, and Clydebank. An ear, nose, and throat consultant from Glasgow performs the operations.

REQUIREMENTS OF THE SUB-REGION

333. Assuming that a population of 80,000 is to be served, and allowing 6 beds per 1000 as the standard for the treatment of the acute and chronic sick, a total of 480 general beds would be required. A new central hospital, therefore, containing 400–500 beds, might well be established in the vicinity of Dumbarton or Vale of Leven. For infectious diseases the same population would require 120 beds, but the existing provision is much in excess of that figure. Assuming that the whole population of the county were to be served for infectious diseases, the requirements on a standard of 1·5 beds per 1000 would be 233 beds, which is still below the actual number in existence. It thus appears that the dispersal of the accommodation into seven small institutions is wasteful, and is an added argument for centralisation. We suggest that an infectious diseases hospital of 200 beds might be erected within the same curtilage as the proposed new general hospital.

334. At present there are no beds within the county for maternity, except one or two for emergency purposes in Townend Hospital. The requirements of the whole county would be in the region of 130 beds, and it is suggested that a unit of approximately this size should be built within the same curtilage as the proposed new general hospital. Alternatively, a smaller unit of 75–100 beds could be built at that point, and a small maternity home for normal cases erected at Helensburgh and another at Clydebank.

335. For tuberculosis there is no special provision in the county. It may be desirable to continue the arrangement whereby cases are treated in institutions outside the county. The total requirements for pulmonary tuberculosis are probably 100–120, and these might well be provided in one of the large country institutions in Stirlingshire, Renfrewshire, or Lanarkshire. Alternatively, a tuberculosis unit might be erected in the proposed new general hospital. On the reduced population of 80,000, however, the number of beds required would be considerably less, probably 50 or 60. In this case a small section of the general hospital could be devoted to the treatment of urgent cases of pulmonary tuberculosis and other chest diseases, and the majority of the cases sent to institutions elsewhere.

Non-pulmonary tuberculosis in our view should be treated in one of the regional orthopaedic hospitals.

336. In considering the regional population we have estimated that a considerable proportion of the population of Dunbarton County will look towards Glasgow for hospital services. On the other hand, it would probably be better in the case of infectious diseases, tuberculosis, and maternity to cater for the needs of the whole county as a unit. Thus after the scheme has been fully developed the population marginal to Glasgow will continue to turn in that direction for its general hospital service, but the sub-region should be able to provide all the other services for itself, with adequate arrangements for liaison with the larger units in Glasgow. For example, as regards maternity work the Royal Maternity Hospital will continue to be available for cases of special difficulty.

SUMMARY

337. The County has at present no fully equipped general hospital, no maternity accommodation, and no accommodation suitable for the treatment of tuberculosis. The infectious diseases accommodation is spread over seven small and mostly out-of-date hospitals. The question is whether the County, in virtue of its dependence and proximity to Glasgow, should be constituted a sub-region. We are inclined to think it should, and that a district hospital should be built somewhere near Dumbarton. Associated with or part of this district hospital there should be a central infectious diseases hospital and a maternity hospital. In some of the other populous parts—such as Helensburgh,

Clydebank, and Kirkintilloch—small maternity homes for normal cases might with advantage be provided. The proposed district hospital would have close liaison with the appropriate central hospital in Glasgow—the Western Infirmary—and would draw from that source its consulting and specialist staff. By reason of its small size the sub-region could not support a full range of specialists, although a surgeon and physician might be appointed to the district hospital. Laboratory services may only be possible to a limited extent, and should be run in co-operation with a central laboratory in Glasgow for both hospital and public health purposes.

LANARKSHIRE SUB-REGION

338. The County of Lanark has a total population of 508,112 according to the estimate of the Registrar-General in 1938. It is situated mainly in the central industrial and mining belt of Scotland, but extends southwards into upland country. By far the greater part of the population is to be found in the industrial part of the county within a radius of six or eight miles of a central point taken at the west end of the Burgh of Motherwell. The large burghs have the following populations :

Airdrie	28,134
Coatbridge	45,045
Hamilton	39,315
Motherwell and Wishaw	67,696
Rutherglen	25,441

339. The fact that populous areas of the county are in juxtaposition to Glasgow raises important boundary problems. Most of the people in these areas have been accustomed to look to Glasgow for major hospital services, and normally their lines of transport tend towards the city rather than towards any part of the county. It is therefore desirable to include a proportion of the county population in our estimation of the hospital requirements of the Central Sub-region (Glasgow) and to deduct an equivalent number from the county sub-region. This does not mean interfering with county boundaries in any way, but merely provides for the normal flow of patients according to their custom and their preferences. We would therefore assume that about 80,000 would normally seek hospital treatment in the city. The population to be served by the county sub-regional scheme is therefore reduced by this number for tabulation purposes.

340. Within the county the principal aggregations of built-up areas are around Motherwell, Hamilton, and Bothwell towards the south of the industrial belt, and Coatbridge and Airdrie towards the north. The main trunk road to Edinburgh passes between these areas. To the north-west of the county the parishes of Cadder and Kirkintilloch, and perhaps part of Cumbernauld, are within easier reach of Glasgow than the central parts of the county. Also, the burgh of Rutherglen is now enclosed on three sides by the City of Glasgow.

341. The hospital provision in Lanarkshire prior to the war was fairly adequate in respect of the number of beds for infectious disease and tuberculosis. On the other hand, general hospital provision, including beds for chronic and long-term cases, was very deficient, due to the reliance placed on the Glasgow hospitals. Maternity accommodation was also very much below the amount required. Infectious diseases hospitals were small units—with the exception of the County Hospital, Motherwell. Hairmyres was a well-equipped hospital for tuberculosis, but the other institutions for this purpose were too small and not well enough equipped to be effective. Only one maternity unit (Motherwell Burgh) was modern. Poor law institutions with hospital sections were out of date and unsuitable for the treatment of the sick. During the war, however, considerable additions to accommodation for general and special diseases were made in the form of Government E.M.S. huts at Hairmyres, Stonehouse, and

Cleland. Hairmyres now functions as a large well-equipped general hospital. Stonehouse functions in the same way, but is less elaborately equipped. The up-graded poor law institution at Cleland has also been extended by the addition of huts and is now a general hospital.

342. The following is a list of the hospitals in the sub-region, with the numbers of beds available:

Type.	Hospital.	Beds.	
General			
L.A.	County Hospital, Cleland	236	
	County Orthopaedic Hospital, Stonehouse	500	
	Hairmyres Hospital	780	
		—	1516
Voluntary	Kello Hospital, Biggar	21	
	Lady Home Hospital, Douglas	20	
	Lockhart Hospital, Lanark	104	
	St Mary's Hospital, Lanark	100	
	Blantyre Cottage Hospital	—	
	Alexander Hospital, Coatbridge	32	
		—	277
	Scottish Homœopathic Hospital for Children, Mount Vernon (see Glasgow Sub-Region)	—	
	Victoria Infirmary, Auxiliary Hospital, Philipshill (see Glasgow Sub-Region)	—	
E.M.S.	Law Hospital, Carluke		840
	Total		2633
Infectious Diseases	Roadmeetings Hospital, Carluke	84	
	Dalserf Hospital	—	
	County I.D. Hospital, Motherwell	232	
	Wester Moffat I.D. Hospital, Airdrie	50	
	Coathill I.D. Hospital, Coatbridge	73	
	Udston I.D. Hospital, Hamilton	40	
	Motherwell I.D. Hospital	124	
	Lightburn Joint Hospital	76	
		—	679
Tuberculosis	Roadmeetings Hospital, Carluke	20	
	Longriggend Sanatorium	51	
	County Sanatorium, Shotts	55	
	Coathill Hospital, Coatbridge	28	
	Glenlee Hospital, Hamilton	18	
	Wishaw Sanatorium	84	
		—	256
	(Tuberculosis beds also in Hairmyres and Stonehouse Hospitals)		
Maternity	Bellshill Maternity Hospital	67	
	Airdrie House, Airdrie	24	
	Beckford Lodge, Hamilton	18	
	Motherwell Maternity Home	30	
		—	139
Convalescent Maternity, or other Institutions	County Hospital, Lanark	36	
	Calderbank Home, Baillieston	29	
		—	65
Poor Law Institutions	Crosslaw Home, Lanark	28	
	Old Monkland Home, Coatbridge	69	
	Hamilton Home	51	
	Airbles House, Motherwell	40	
	Thrashbush Home, New Monkland	34	
		—	222
Convalescent, etc., Homes	Dunavon Children's Home, Strathaven	80	
	Wiston Lodge	50	
	Lenzie Convalescent Home	80	
	Lady Hozier Convalescent Home, Lanark	—	
		—	210

The following are brief notes on the individual institutions.

GENERAL HOSPITALS:

343. (1) *County Hospital, Cleland,* before the war was a poor-law institution of 146 beds in stone-built pavilions of one and two storeys. It was upgraded by alterations and the addition of E.M.S. huts so that its present accommodation is 272 beds, although on peace-time standards this figure should be reduced to 236. It has an X-ray department and an operating suite.

The accommodation generally is on a fairly good standard, but there is a deficiency of nurses' bedrooms, and consequently thirty nurses are billeted at Cleland House, some two and a half miles distant. The environment of the hospital is far from ideal, but its position in relation to population is worthy of special consideration.

While we do not consider this institution a suitable one for inclusion in the permanent scheme as an acute general hospital, we consider that it would give adequate service for the less acute type of case. Accordingly we recommend that it should be retained as a 236-bed general hospital as at present, pending the completion of a district general hospital for the County of Lanark.

344. (2) *Hairmyres Hospital, East Kilbride,* was a sanatorium colony with 240 beds before the war. The total number of beds now is 996. The war-time addition is in the form of eighteen Government E.M.S. huts of both types. The site is extensive (320 acres) and in open country. It includes a farm. It is about twelve miles from Glasgow, and Hairmyres Railway Station is at the entrance gate.

The original hospital consists of two-storey pavilions of brick and roughcast with a centrally placed administrative block. In 1938 were added a modern treatment block—of two storeys and containing elaborate X-ray diagnostic equipment and operating theatre facilities—and a new nurses' home. More recently, extensions have been made to the laboratory. At one time it was intended to develop the hospital as a sanatorium colony and for some years there was a scheme of training the patients in various occupations—boot-making, basket-making, motor engineering, etc. There were workshops for all these purposes. Now there is a rehabilitation department for occupational therapy run in connection with the orthopaedic unit. At present, under the E.M.S., there is a large orthopaedic unit of 300 beds, a thoracic surgical unit of 50 beds, and other general medical and surgical accommodation, besides the original tuberculosis wards. The special facilities for orthopaedics and for surgery of the chest might well be retained as key units.

Under peace-time conditions the bed accommodation, including the added Department of Health huts, would be approximately 780, but there is need for considerable enlargement of the nurses' home by provision of additional wings, and also for increase in the accommodation for domestic staff, which is very deficient. We recommend that Hairmyres be continued as a general hospital with special reservations of beds and units for tuberculosis and chest diseases and for orthopaedics.

345. (3) *County Orthopaedic Hospital, Stonehouse.* Before the war this was a small hospital of 80 beds for the treatment of non-pulmonary tuberculosis. E.M.S. huts have been added, making a total of 640 beds. On a peace-time standard 500 would be a suitable figure. The site is near Stonehouse village and in open country, with ample ground adjoining should extension be required.

The original part of this hospital, dating from 1897, is of the usual isolation hospital construction, but improvements have been made from time to time, *e.g.,* the addition of a cubicled pavilion and a treatment block containing X-ray, operating theatre, and laboratory services. The E.M.S. additions are

fourteen wards for patients, with theatres and X-ray room, a hutted garage and store, as well as a hutted nurses' home with accommodation for 140 nurses.

This institution could be regarded as a country hospital for general purposes, including tuberculosis, and could serve a useful purpose for some time to come. Further improvements in structure and services are required, particularly in the extension of central heating and administrative accommodation. Our recommendation is that it be retained and used as either a general or an infectious diseases hospital, according to the ultimate plan decided upon for the County of Lanark, pending the construction of permanent central hospitals for these purposes.

346. (4) *Law Hospital, Carluke,* is an E.M.S. Hospital of standard Government huts laid out in four groups. The total number of beds is 1200, but on peace-time standards that figure should be reduced to 840. The site is in open country—rather bleak and exposed, but will probably improve with cultivation. It is only about seven miles from Motherwell, and although at present is not too easy of access, this difficulty may be overcome with improvement of transport after the war.

To make this hospital conform to peace-time requirements it would be necessary to make several improvements and re-arrangements, *e.g.* (1) the heating systems for water and buildings should be centralised; (2) each ward might be provided with patients' cloakroom and sanitary accommodation at the far end, including possibly a small day-room, and the present small rooms at the corridor end altered to provide doctors' room, an enlarged ward kitchen, sisters' room, and increased storage capacity; (3) there should be a reduction of the bed accommodation in each 40-bed ward to approximately 28 beds, with provision of single rooms as required; (4) there should be improvement in the accommodation for nurses and domestic staff and further provision for recreation.

We recommend that this hospital should be transferred at the end of the war to the sub-regional service for Lanarkshire with a view to its being used, temporarily at least, as a central hospital for infectious diseases. This will involve the reconstruction of certain wards and cubicles and might still further reduce the total number of beds. We estimate that as a fever hospital it should be regarded as providing a total of about 700–800 beds.

347. (5) *St Mary's Hospital, Lanark,* is a hospital of 100 beds (including 20 for private patients), controlled and administered by the Sisters of Charity, but available to patients of all religious denominations. Although of considerable size, we class it as a cottage hospital in view of the character of its staff and the services offered. The building, erected in 1872, is of old design, but the wards and annexes are spacious and suitable for continued use. The site is closely built up all round.

At present it functions partly as a hospital and partly as a convalescent home for patients from Glasgow and other areas as well as Lanark. We recommend that it should continue to do so. We add the rider that for use as a cottage hospital the Managers should appoint all local practitioners to the staff, and should restrict the work (particularly as regards major surgery) to the proper sphere of a cottage hospital.

This hospital could continue to serve its present purpose with adjustments of medical staffing arrangements and close association with the appropriate district hospital.

348. (6) *Alexander Hospital, Coatbridge.* This cottage hospital of 32 beds was founded in 1899. Extensions were made in 1925 when one ward, X-ray room, and theatre were added. The site is 5–6 acres, now surrounded by a rehousing scheme. There is room for further extension. The buildings are

substantial and well maintained. The X-ray room has a 4-valve diagnostic machine. The theatre is good. The kitchen is rather small but efficient, and there is a small laundry with mechanical equipment.

This hospital should be developed as a home hospital and health centre.

349. (7) *Scottish Homœopathic Hospital for Children, Mount Vernon.* This small children's hospital of 28 beds has not been visited. In view of the tenets of its medical staff it is unlikely to be incorporated into the regional scheme.

350. (8) *Kello Hospital, Biggar.* This cottage hospital has now 21 beds and is on the usual cottage hospital lines. It serves a real local need and should continue to be used for " general practitioner " cases, but should not carry out major surgery except in unavoidable emergency. Access is more convenient by road from Edinburgh but by rail from Glasgow. In a regional scheme the institution might be used as a local practitioner centre and be associated with the appropriate district hospital in Lanarkshire.

351. (9) *The Lady Home Cottage Hospital, Douglas, Lanarkshire,* with accommodation for 20 patients, is a satisfactory cottage hospital, both from the point of view of construction and function. It serves a useful purpose in a rural area where access to large hospitals is often difficult and where there is a large mining population. It should continue as a home hospital with the usual recommendations for linkage with the appropriate district hospital.

352. (10) *Lockhart Hospital, Lanark,* is a cottage hospital of 20 beds, built in 1877. It stands on a steep hill at the north end of Lanark, and there is little room for extension. The addition of four war-time huts brings the total number of beds up to 140, 104 on peace-time standards; but in view of the diminishing use which is being made of the original hospital and the fact that even at its present size it is not big enough or well enough equipped to act as a general hospital, we cannot at present definitely allocate it to a position in the regional scheme. It might prove serviceable as a cottage hospital if no other accommodation were available, but there is in Lanark a larger and better equipped hospital. Its conversion for use for the chronic sick has also been considered, but it is not at all certain that it could be made suitable for that purpose. Thus we can make no specific recommendations about this institution at the present time.

Maternity Hospitals:

353. (1) *Bellshill Maternity Hospital.* There are 67 beds for patients. The wards generally have the appearance of overcrowding. The space for sanitary equipment is also deficient, although a number of useful bed-pan and other sterilisers have been installed. The site is not attractive, and the general approach and appearance of the hospital do not commend it.

The general structure and lay-out of this institution, the condition and arrangement of the wards, and the equipment are below the standard required for the treatment of the sick and render the institution unsuitable, according to modern standards, for the continued reception of maternity cases. We consider that it should be abandoned and replaced by a new maternity hospital in a better situation.

354. (2) *Airdrie House Maternity Hospital* is a converted mansion-house in good surroundings with room for expansion. There are 24 beds for patients, but the accommodation is not suitable for the reception of maternity cases and the equipment is poor and out of date.

We recommend that this institution should be abandoned and replaced by a new one as part of the general County maternity scheme.

355. (3) *Beckford Lodge Maternity Home* has 18 beds for lying-in cases. The accommodation in the older part of the home is old-fashioned and out of date,

but the new wing—7 beds, labour theatre, nursery, etc.—is on modern lines. The site is restricted and in a built-up area. Child welfare, dental, and ear, nose and throat clinics are conducted in part of the old building, but the accommodation is not very suitable.

With the exception of the new part, it is not a very satisfactory unit, but in our view would serve a good purpose if re-designed as a health centre or group clinic.

356. (4) *Child Welfare Centre, Motherwell.* The site contains the child welfare centre and the maternity hospital. There is no room for expansion. The buildings are modern, dating from 1923. The maternity home was extended in 1935 by the addition of several cubicles. There are 30 beds, although up to 36 patients can be taken. The accommodation is good, although the theatre is restricted in size, but more beds will be required in the future to serve the needs of the burgh.

This institution should continue to be used as a maternity home, but preferably only for " normal " cases. The attached clinic is a useful nucleus for a health centre. The maternity home is essentially well designed and equipped for its purpose.

357. (5) *Calderbank House and Convalescent Home, Baillieston,* is a country mansion on the outskirts of Glasgow altered to provide 29 beds for abortion cases. It functions in association with Bellshill Maternity Hospital. The building was taken over in 1920, and an extension added in 1929. It cannot, however, be regarded as more than a temporary place of accommodation for the sick, as it has all the drawbacks and inconveniences of a house built as a private residence.

We recommend that this institution should not be used for the sick in any scheme of post-war planning, but may be continued as a children's home.

358. (6) *County Hospital, Lanark,* is a small fever hospital which now functions as a convalescent maternity home of 36 beds. It is the typical small fever hospital constructed on the pavilion plan.

This hospital is too small to be a satisfactory unit either for the treatment of infectious diseases or tuberculosis, but with some redesigning it might be used for the care of aged and infirm persons.

POOR LAW INSTITUTIONS:

359. (1) *Crosslaw Home, Lanark.* This institution, which has 28 beds for chronic cases, although fairly well maintained, is the old type of poor law institution, and is not suitable for the care of the sick.

360. (2) *Old Monkland Home* occupies a depressing site in Coatbridge. The hospital part now contains 69 beds, and there is also an asylum for milder types of lunatic. The main block of this institution is old and done, with dark corridors and crowded dormitories, and the impression is one of general neglect. The dining-room is very gloomy. The hospital is very little better than the main house, and the asylum block is totally unsuitable for patients of any kind.

We are of opinion that this institution is quite unsuitable for the care of the sick and should be abandoned.

361. (3) *Thrashbush Home, New Monkland.* In this mixed poor law institution there are 34 beds for sick persons. The site is good, well away from other buildings, and although fully built up, there is plenty of room for extension to neighbouring ground. The building itself is of the old poor law type, and the extensive reconstruction needed to bring it up to modern standards could not be justified.

We recommend that the institution should no longer be used for the care of sick persons.

362. (4) *Hamilton Home* has 51 beds for chronic cases—aged and infirm. The buildings are of traditional poorhouse architecture.

According to present-day standards this institution is unsuitable for the treatment of the sick and should no longer be used for this purpose.

363. (5) *Airbles House, Motherwell,* has a separate hospital building for the treatment of chronic medical cases. There are 40 beds.

The standard of accommodation and equipment of this institution is not suitable for the sick.

INFECTIOUS DISEASES HOSPITALS:

364. (1) *Roadmeetings I.D. Hospital, Carluke,* is a hospital of 104 beds, owned by Lanarkshire County Council. It is located close to Carluke on a site of approximately 15 acres. Eighty beds are used at present for infectious diseases. They are disposed in three pavilions, one of which is divided into cubicles. These pavilions and the administrative block are in good condition and suitable for continued use. The remaining 24 beds are used at present for tuberculosis. This pavilion is less satisfactory and should be replaced when practicable.

This hospital is too small and its accommodation too inflexible for satisfactory use for infectious diseases. It could be converted readily for the treatment of pulmonary tuberculosis—especially convalescent cases, and occupational services should be provided.

365. (2) *Dalserf Hospital, Larkhall,* is a temporary wooden building about fifty years old, with 15 beds reserved for smallpox. It is not suitable for use as a hospital.

366. (3) *County I.D. Hospital, Motherwell,* is a hospital of 232 beds owned by Lanarkshire County Council. It is located on the outskirts of Motherwell, on a site of approximately 20 acres, immediately adjoining the Motherwell Burgh Infectious Diseases Hospital. The hospital was built in 1897, the nurses' home added in 1910, and a two-storey ward block in 1920. Patients' accommodation is contained in ten pavilions, eight of which are single-storeyed. Of the 232 beds, about 60 are in rooms or cubicles, and the rest in wards of 10–14 beds each. There are a laboratory, small X-ray department, operating room, lecture room, and museum. The gatehouse has a large waiting hall and three consulting rooms, and is used for diabetic and ophthalmology clinics. There is a nearby hut with waiting room and consulting rooms, used for venereal diseases, orthopaedic, and thoracic surgery clinics. The ward units are of rather old-fashioned design, but the hospital as a whole is of sound construction. Although the hospital as a whole functions efficiently, a good deal of reconstruction would be required to bring it up to date as an entirely satisfactory infectious diseases hospital according to modern standards. We believe that consideration has been given by the County Council to the building of a new fever hospital of 500 beds on another site. The site of the County Hospital, however, is very suitable as a centre for out-patient and consultation services, and it might well be devoted in future to these functions on an extended scale. Some of the buildings, after alteration and adaptation, might be used for maternity for acute general hospital cases in association with a principal county general hospital, and a part could be reserved or constructed for reception of the chronic sick. In the long-term policy the whole site of the County Hospital and the Motherwell Burgh Hospital could be devoted to these purposes.

367. (4) *Wester Moffat I.D. Hospital, Airdrie.* This hospital of 50 beds is owned by Airdrie Burgh. It consists of a large country mansion in attractive policies, with three pavilions built in 1929; 34 beds are used for infectious

diseases and 16 for tuberculosis. All are disposed in rooms of 1, 2, or 4 beds, and there is a verandah for tuberculous cases.

The mansion-house is a tall structure, rather difficult to administer, and is not a suitable building for its purpose. The site is very attractive and the pavilion wards are well designed.

This hospital is too small for the modern treatment of infectious disease, and we recommend that it should be used for the care of the aged and infirm.

368. (5) *Coathill I.D. Hospital, Coatbridge,* is a hospital of 101 beds owned by the Burgh of Coatbridge; 73 beds are used for infectious diseases and 28 for tuberculosis. It is located in a built-up area within the Burgh of Coatbridge. The site is unattractive and subject to subsidence—the hospital has suffered damage from this cause, and some of the buildings are in a state of disrepair.

Apart from structural defects and its situation, the hospital is unsuitable for the treatment of tuberculosis, while the inflexibility of its accommodation renders it also unsuitable for infectious diseases. It should be discontinued as soon as practicable.

369. (6) *Udston I.D. Hospital, Hamilton.* There are nominally 52 beds in this hospital, although 40 would be a better figure. It stands in attractive grounds, with ample room for extension. The accommodation for patients is in the mansion-house and in one pavilion of modern design. The mansion-house is not well equipped or arranged for the reception of infectious cases, and the pavilion has only 26 beds.

The hospital is too small to be an effective unit. The use of the rooms in the house for infectious cases is not in accordance with modern standards, and in view of the development of the regional scheme we suggest that the institution should be ultimately given up as an infectious diseases hospital and that patients from the Burgh be treated in the County Infectious Diseases Hospital. There is, however, scope for development into a larger institution which might be devoted to the care of aged and infirm persons.

370. (7) *Burgh I.D. Hospital, Motherwell,* is a hospital of 124 beds, owned by the Burgh of Motherwell and Wishaw, and is adjacent to the larger County Hospital. Patients' accommodation is contained in four pavilions, disposed in rooms or small wards which, being fitted with separate sanitary annexes, are very flexible in use. All the buildings are of wood and corrugated iron, but they are well found and well maintained.

There is no justification for separate fever hospitals on adjacent sites. We recommend that burgh patients requiring hospital treatment for infectious disease be admitted to the County Fever Hospital, which may be at Law or elsewhere. This hospital might be made suitable for the chronic sick, in association with the general beds in the adjacent County Hospital.

371. (8) *Lightburn I.D. Hospital, Shettleston,* is a hospital of 76 beds, located close to Shettleston on a built-up site of about five acres. It was built in 1896. Patients' accommodation is contained in four brick pavilions. The 76 beds are disposed mainly in wards of 8–10 beds, but one pavilion has been partitioned to provide partial isolation. The buildings are substantial, and the hospital was for its period a good unit of the pavilion type.

This hospital should not be used for the treatment of infectious disease, but might be redesigned as a suitable home for the infirm or even for the chronic sick, in association with a general hospital.

Tuberculosis Hospitals:

372. (1) *County Hospital, Longriggend,* is a pleasantly situated little sanatorium of 51 beds in a suitable environment, but the actual facilities for nursing bed cases are somewhat deficient. It has been well maintained and is

reasonably up to date for its present purpose. There is, however, no X-ray equipment.

We suggest that it might be continued as a sanatorium for convalescent cases of pulmonary tuberculosis, but not for bed cases or cases requiring active treatment.

373. (2) *County Sanatorium, Shotts,* is a sanatorium of 43 beds and 12 cots, located on the outskirts of Shotts. It was built as a fever hospital in 1896 and converted to its present use in 1912.

This unit is of the usual design of a small fever hospital with an addition of a cubicled ward and a recreation hut. The site is not very satisfactory because of undermining, and the state of the buildings would not justify expenditure on modernising the hospital. It is not large enough for the treatment of infectious diseases or tuberculosis, but might be adapted as accommodation for aged and infirm persons, and from this point of view it is reasonably convenient to the population which it would serve.

374. (3) *Tuberculosis Hospital, Wishaw,* is a hospital of 84 beds owned by the Burgh of Motherwell and Wishaw and located at Wishaw. The site has been liable to subsidence, and the hospital has suffered some damage, but the condition of the buildings is not unsatisfactory. This institution seems to be well managed despite its unattractive buildings and rather bleak situation. The patients' accommodation is in three wood and corrugated iron pavilions. The beds are disposed mainly in wards of 8–15 beds each.

There is a lack of essential equipment for modern treatment of pulmonary tuberculosis ; the treatment of bone and joint cases in small numbers cannot be justified.

We suggest that this hospital be abandoned as a hospital and considered as a possible institution for the care of aged and infirm persons.

375. (4) *Glenlee Hospital for Tuberculosis, Hamilton,* (18 beds) is an old country mansion which has been converted for the care of tuberculosis patients. The building is structurally not sound. A small addition has been erected for ultra-violet treatment and X-ray diagnosis, but the latter plant is minimal in size. A portion of the house is used for child welfare cases—an undesirable feature. The grounds are attractive, but there is no possibility of extension.

This institution is not a suitable one for the treatment of the sick. It might be devoted to the care of aged and infirm persons, but on account of its expensive upkeep we are not certain about this.

Other Institutions:

376. *Dunavon Children's Home* is an entirely modern home with accommodation for 80 children, under the care of the County Public Assistance Department. The buildings are excellent, and provide on a high standard all the facilities necessary for healthy children. The nurses and other staff are accommodated in the mansion-house apart from the new building. The surroundings are pleasant and healthy. Education is provided at the local school.

This institution should be continued for its present purpose.

377. *Convalescent Home, Lenzie,* is a voluntary convalescent home with 80 beds—mostly used by patients from the Glasgow hospitals.

378. *Wiston Lodge* is a convalescent children's home of 50 beds in a converted mansion-house belonging to the County Council.

REQUIREMENTS OF THE SUB-REGION

379. The hospital accommodation available for the Lanarkshire Sub-region in 1938 was deficient both in amount and character. The shortage was

evident, particularly in the categories of general hospitals (of which there were none outwith the City of Glasgow), of maternity hospitals (of which only one small institution could be classed as meeting modern requirements), and of hospitals for the chronic sick (for which there were only the sick wards in poorhouses). Tuberculosis was adequately provided for as regards number of beds, but Hairmyres was the only institution large enough to provide full facilities. As regards infectious diseases, the County Hospital, Motherwell, was the only one sufficiently large to be efficient. Apart from Hairmyres Colony and a few small institutions, there was no hospital in keeping with modern requirements. The situation has been materially altered since the outbreak of war by new temporary construction and the upgrading of three of the hospitals. Hairmyres Colony, by the addition of 18 E.M.S. hutted wards and other accommodation, is worthy to be ranked as a first-class country general hospital. Stonehouse Hospital has been enlarged by the addition of 16 E.M.S. huts, and Cleland Hospital has been upgraded by improvements in structure and by addition of 3 E.M.S. huts, so that this poor law institution may now also rank as a general hospital. Finally, an entirely new factor has been introduced by the new E.M.S. Hospital at Law (of 1200 beds, war-time capacity).

380. It should be noted that while the additions mentioned have raised the total number of beds available a long way towards the requirements of the Sub-region, the new accommodation is only of a temporary character, and moreover, both in location and design, it fails in many respects to offer a satisfactory solution to the hospital problem. The following table shows the existing number of beds in the county and the estimated requirements. The usual reduction is made in E.M.S. wards to give a good working peace-time standard of space.

Type.	Existing Beds.	Beds on Peace-time Standard.	Estimated Total Requirements.	Surplus or Deficiency.
General	3181*	2393	2574*†	—181
Maternity	139	139	429	—290
Infectious Diseases . .	679	679	643	+ 36
Pulmonary Tuberculosis .	496*	496	400	+ 96
	4495	3707	4046	—339

* 240 beds in Hairmyres counted for tuberculosis cases.
† 6 beds per 1000 population served.

Poor law hospital beds number 222, and we estimate that a much larger number will be necessary for the care of the aged and infirm.

381. The total shortage of beds for general hospital purposes is thus not great, but there are material deficiencies for maternity and for aged and infirm persons. The latter are rather outwith our remit, but in the county the treatment of such cases may be associated with care of chronic sick persons and therefore the subject is mentioned here. The difficult problem is to suggest a suitable scheme of rearranging the existing accommodation in accordance with a comprehensive policy, and after consideration we put forward a plan of evolution. The plan is designed to enable a comprehensive hospital scheme to come into operation as soon as possible after the war, but with the object also of suggesting the ultimate provision which there should be in an ideal development.

In making the following suggestions we have kept in mind the need for utilising to best advantage the existing accommodation, including the E.M.S. Hospital at Law and the hutted annexes.

382. **(a) General Hospital Accommodation.** About 2500 beds are required in all, and these could be provided at :

Hairmyres	540*
Stonehouse	500
Law Junction	840
Cleland	236
Voluntary Cottage Hospitals	277
	2393

* Excluding beds for tuberculosis.

With moderate additions the numbers could be made up to requirements ; but further consideration is necessary. All these hospitals are to some extent remote from centres of population, and for a comprehensive scheme facilities will be required for out-patient and emergency purposes. It will also be necessary to consider whether a section of one of these institutions, or some others, should not meantime be devoted to maternity. At present Motherwell County Hospital provides, with very inadequate accommodation, facilities for out-patients in chest diseases, orthopaedics, venereal diseases, diabetes, etc. There is in our view a need for a conveniently situated centre for such purposes and for general medical and surgical out-patients. The future of the County Hospital, Motherwell, and the Burgh Infectious Diseases Hospital is thus of interest at this point, and it is worth considering whether the former should not be altered now and converted to general hospital purposes, with temporary adjustments at present but having in view its ultimate conversion by rebuilding, along with the Motherwell Infectious Diseases Hospital, into a permanent general and maternity hospital. First of all a new out-patient department should be built and gradually the infectious wards altered, the displaced infectious disease patients meantime being sent elsewhere. On the site of these two hospitals there could then be a general hospital of 300 beds with out-patient department and a maternity hospital of 150 beds. This hospital could be linked with the country general hospitals and suitable arrangements made for transfer of patients as required. At the same time, either Stonehouse or Law Hospitals could be temporarily diverted to the treatment of infectious diseases. Cleland Hospital would be used for general cases during the development of the plan, but ultimately discontinued.

383. **(b) Maternity Accommodation.** If 150 beds could be provided at Motherwell, a further 150 could be added to one or other of the country hospitals, at either Law or Hairmyres. The former would be the more convenient for the population. A third unit would be required to replace Bellshill and the two smaller hospitals at Airdrie and Hamilton. The site of this would require to be selected.

The first priority in hospital construction might be given to maternity, and with the suggestion made, some 450 beds would be ultimately available. One or two smaller units for normal cases will probably also be required—for example, at Hamilton.

384. **(c) Infectious Diseases.** The outcome of the preceding suggestion would be the conversion of the two Motherwell fever hospitals into one general and maternity hospital. A new hospital for infectious diseases will ultimately have to be provided, and a unit of about 500 beds should be built on a convenient site to be selected. We understand that the County Council had contemplated a central infectious diseases hospital near Stonehouse, but this might be too inaccessible. Probably a better suggestion would be in the region of Hairmyres. The district round Hairmyres is likely to be an important hospital area since there are already three large institutions within easy reach of one another and a fourth is to be built by Glasgow Corporation. There is some advantage in having a group of hospitals fairly close together in a sort of hospital city, and in this case the addition of a fever hospital to the group would add to its

resources and would make for less isolation of staff—a point to which we have already drawn attention. The new fever hospital might, on the other hand, be sited beside Law Hospital and that hospital used meantime for infectious diseases until the new unit is completed. Most of the smaller fever hospitals belonging to the county and to the burghs should be discontinued for that purpose and converted to other uses, such as the care of aged and infirm persons and possibly chronic sick.

385. **(d) Tuberculosis and Chest Diseases.** The main centre should be at Hairmyres, and Longriggend and Roadmeetings should be used as convalescent hospitals for tuberculous patients. Between these a sufficiency of beds should be available.

SUMMARY

386. The sub-region, prior to 1939, was very deficient in general and maternity hospital accommodation. Infectious diseases accommodation was, with the exception of Motherwell County Hospital, spread over a number of small institutions. Tuberculosis was on the whole fairly well provided for. There was quite inadequate accommodation for the aged and infirm and the chronic sick.

387. Suggestions are put forward for providing an adequate hospital service by utilising and developing the new E.M.S. accommodation, changing the functions of certain hospitals, and new building.

388. We propose an interim plan which would utilise Motherwell County and Burgh Infectious Diseases Hospitals for general and maternity cases, and Stonehouse, Hairmyres, and Cleland as general hospitals ; utilise Law Junction for infectious diseases until a new hospital could be built ; continue to use the smaller infectious diseases hospitals for that purpose till they can be discontinued.

389. On a long-term policy there should be a completely new general and maternity hospital at Motherwell on the sites of the two infectious diseases hospitals. Law Junction should be developed for general hospital purposes, and Hairmyres also. This would mean gradual replacement of the existing E.M.S. huts. Stonehouse would also in the same way be developed as a general hospital and Cleland would ultimately be abandoned. All these would have administrative co-operation in the sub-regional scheme with the new centrally placed hospital at Motherwell. The cottage hospitals would carry on as home hospitals, and wherever possible be enlarged to form group practice or health centres as well. There would be a new infectious diseases hospital near Hairmyres or Law Junction, or at some other site to be selected. Three new *maternity units* should be built—Motherwell Hospital, Law Hospital, and one in place of Bellshill. Smaller units for normal cases might with advantage be placed at Hamilton and Coatbridge. Tuberculosis and chest diseases should remain as at present, with the principal centre of treatment at Hairmyres, and the two small units at Longriggend and Roadmeetings could deal with convalescent cases ; the two latter hospitals might be equipped for rehabilitation. Hairmyres would also continue as an orthopaedic hospital for children and adults and for non-pulmonary tuberculosis. In the future other special units might be developed in Law and at Stonehouse. For the aged and infirm and some types of chronic sick, some accommodation might be found in the discontinued small fever and tuberculosis hospitals, but such accommodation would only amount to about 300 beds, whereas about 800 would probably be required. For this purpose small local hostels are probably the best solution, built as and where the need is felt.

390. The future of industry and employment in Lanarkshire will affect the trend of population, and the foregoing suggestions are made on the assumption

that the industries in the county will continue to support a population at least equal to that presently existing. If, on the other hand, it is found that a decline is taking place, then the scheme of hospital development can be modified accordingly.

RENFREWSHIRE SUB-REGION

391. The county of Renfrew has a total population of 317,179 according to the estimate of the Registrar-General in 1938. The distribution is unusual in that there are two main aggregations separated by a broad rural belt—an Eastern portion around Glasgow and Paisley and a Western portion around Greenock and Port Glasgow. This ready-made separation into an Eastern and a Western division will have an important bearing on our recommendations for hospital services, but for the moment it is desirable to study the county as a whole.

392. Glasgow is, and will remain, the centre for the more specialised hospital services, but hitherto a considerable number of Renfrewshire residents have gone to the city hospitals for what may be regarded as " district " services. In a fully developed regional scheme there will no doubt be some change in this respect, but we estimate that a suburban portion of the county, with a population of about 16,000, will continue to rely on Glasgow for all forms of hospital care ; this group is therefore included in the Glasgow Sub-region. The population of the Renfrewshire Sub-region now under consideration thus amounts to 301,170, or in round numbers 300,000.

393. The following is a brief review of the hospitals as they existed in 1938.

General Hospitals. For the acute sick the hospital provision was entirely voluntary. The Royal Alexandra Infirmary, Paisley, admitted in 1938 a total of 3767 patients, of whom 574 were resident in landward districts of the county ; and the Greenock Royal Infirmary admitted in the same period 2310 patients, of whom 114 were county residents (105 from Gourock). The total number of beds for acute cases in the county as a whole is 614 ; this gives a figure of just over 2 per thousand of the population.

Hospitals under the Poor Law. The provision for the chronic sick and the infirm who require hospital care was confined to two poor law institutions : Craw Road, Paisley, with 227 sick beds, and Smithston, Greenock, with 114. The latter, however, received patients from Greenock exclusively. The Paisley institution in 1938 admitted 286 patients from the county and 798 from Paisley. The total accommodation represented 1·1 beds per thousand of the population.

Maternity. The number of beds reserved for maternity was 102. The Rankin Memorial Hospital, Greenock, received patients from that burgh only ; the Thornhill Hospital, Johnstone, was reserved for Renfrew County (807 patients) and Port Glasgow Burgh (123 patients). The Burgh of Paisley is served by the Barshaw Home.

Tuberculosis. The number of beds reserved for tuberculosis is nominally 305, but 189 of these were in Bridge of Weir Sanatorium. In the year 1938 only 9 patients were admitted to this institution from the county, 9 from Paisley, and 46 from Greenock. It is understood that the majority of these patients were admitted under private arrangements, but one might fairly estimate 20 beds as being the maximum number of beds used by the county as a public authority. This analysis would give a total number of beds for pulmonary tuberculosis of about 150, to be correlated with 180–200 annual deaths. There is no special provision within the county for the treatment of non-pulmonary tuberculosis.

Infectious Diseases. Accommodation for infectious disease comprises a large modern hospital at Paisley (151 beds) for patients from the Burgh, and an occasional case from the county ; a hospital of 104 beds at Greenock, admitting patients from Greenock, Gourock, and Port-Glasgow ; and three small county isolation hospitals providing 136 beds in all. The total accommodation is therefore 391 beds, equivalent to 1·3 per thousand of the population.

394. The distribution of beds in the county is summarised as follows :

Type.	Hospital.	Beds.	
General	Royal Alexandra, Paisley	220	
	Glen-Coats, Paisley	50	
	Eye Infirmary, Paisley	16	
	Duncan M'Pherson, Gourock	12	
	Royal Infirmary, Greenock	168	
	Larkfield, Greenock	70	
	Broadstone, Port Glasgow	24	
	Eye Infirmary, Greenock	13	
	Ear, Nose, and Throat, Greenock	20	
	Johnstone and District Cottage Hospital	21	
		—	614
Maternity	Johnstone Maternity Hospital	39	
	Barshaw, Paisley	35	
	Rankin Memorial, Greenock	28	
		—	102
Pulmonary Tuberculosis	Darnley I.D.	18	
	Johnstone I.D.	30	
	Paisley I.D.	30	
	Gateside I.D., Greenock	20	
	Peesweep, Johnstone	18	
	Bridge of Weir Sanatorium	20	
		—	136
Infectious disease	Darnley I.D.	40	
	Johnstone I.D.	56	
	Johnstone Smallpox	40	
	Paisley I.D.	151	
	Gateside I.D., Greenock	104	
		—	391
Poor Law	Craw Road, Paisley	227	
	Smithston, Greenock	114	
		—	341

The following is a brief description of the individual hospitals :

395. *Royal Alexandra Infirmary, Paisley*, is a well-equipped voluntary hospital serving Paisley and the surrounding area. It was opened in 1900, and various additions have been made to the original hospital. There is little room for extension, but improved accommodation could be secured by gradual replacement of the older parts of the building. The general facilities are good : the X-ray department is well equipped, and operating theatres are adequate for the needs of the hospital. At present there are 220 beds, but a reduction to (say) 150 would give an opportunity for the creation of a first-class casualty and accident unit.

396. *The Glen-Coats Auxiliary Hospital, Paisley*, is a well-built and well-fitted convalescent department of 50 beds, and is regarded as an integral part of the Royal Alexandra Infirmary. In our view this unit should continue to serve as an annexe of the main district hospital.

We are of the opinion that the Royal Alexandra Infirmary should continue to serve as the district hospital for the eastern part of Renfrewshire. Certain improvements and additional facilities, such as accommodation for specialties and for children, will have to be considered, either on the site of the present hospital or preferably in some associated country hospital.

397. *Johnstone and District Cottage Hospital* has 21 beds. Facilities are good, and the equipment and services are adequate to provide an excellent hospital for general practitioners in the Johnstone area. It may be further developed as a home hospital and group practice clinic.

398. *Royal Victoria Eye Infirmary, Paisley,* is a small independent hospital which has a function and scope similar to those of the Eye Infirmary, Glasgow, and the Eye Infirmary, Greenock. It has a very busy out-patient department. The problem of finding nursing staff in this case is not difficult, possibly because of the excellent accommodation provided for nurses and the proximity to a centre of population. The admission of patients is not confined to the Burgh of Paisley, but the hospital serves the surrounding district as well. It is well situated for the work of its particular specialty.

Its deficiency in such services as radiology and pathology make it desirable that it should be more closely associated with the district hospital —Royal Alexandra Infirmary—and in the future some scheme of co-operation should be established. This will become increasingly necessary to secure a continued supply of nursing staff.

399. *Johnstone Maternity Hospital* has a converted mansion as its administrative headquarters, but the main ward-block is an excellent modern unit of 39 beds. Facilities and equipment are good ; there are three labour rooms and an operating theatre, as well as three rooms for isolation. A full-time resident obstetrician is on the staff.

We recommend that this unit be retained and extended as a maternity home and brought into close co-operation with the proposed new maternity hospital at Paisley. There is room for an additional 36–40 beds on the present site.

400. *Barshaw Maternity Home, Paisley,* was converted from an old mansion-house, and although ward accommodation is fairly good, slunge rooms and other sanitary facilities are deficient. The theatre does duty as an emergency labour room and nursery, while the sterilising room deals with babies' bottles. There is no radiological department, and pathological work is carried out at the E.M.S. Laboratory, Paisley. There is a resident medical officer.

We consider that this unit should be abandoned and replaced by the proposed new maternity hospital at Paisley, in the grounds of the present I.D. Hospital.

401. *Darnley I.D. Hospital, Nitshill,* is a stone-built hospital, dating from 1889, and comprising three pavilions. The site is not built up, but the situation hardly lends itself to new building. Many improvements have been made to the original hospital, but the general design is obsolete. Part of the hospital consists of a sanatorium block, and occasional surgery is done here. There is a portable X-ray set.

The hospital has 40 beds for infectious disease and 18 tuberculosis beds, but is no longer adequate for the treatment of either fevers or tuberculosis. We consider that this unit should no longer be used for the treatment of the sick, but the buildings might conceivably be adapted for the housing of the aged and infirm.

402. *Johnstone I.D. Hospital* is a rural type of fever hospital dating from 1887. Improvements and additions have been made to the original building. The site, however, is low-lying, in a damp, rather foggy area. Accommodation amounts to 86 beds including, in addition to the usual isolation blocks, a sanatorium ward of 30 beds originally built as a temporary structure. Facilities and equipment are poor.

This unit is completely out of date, and is no longer suitable for the treatment of infectious diseases or tuberculosis. We make no recommendation for its future use.

403. *Johnstone Smallpox Hospital* is a "Speirsesque" group of buildings adjacent to the fever hospital. It has been well kept, but is lighted only by gas. The accommodation is nominally 40 beds, but no case of smallpox has been treated here since 1920. It is used as an overflow from the fever hospital.

We suggest that this hospital, along with the fever hospital, has outlived its useful function and should be abandoned.

404. *Paisley I.D. Hospital.* This is a modern hospital built of brick, with cement facings. The total area of the site is 75 acres—25 acres of which is occupied by the fever hospital; there is thus ample room for additional building development. The hospital consists of six single-storey pavilions and one two-storey pavilion containing the operating theatre. Accommodation amounts to 181 beds, including 30 for tuberculosis. The design and facilities are excellent, but the hospital lacks an X-ray department and out-patient services.

In the regional scheme this hospital should be retained as the central infectious diseases hospital for East Renfrewshire, with additions as necessary. The grouping of a general hospital and a maternity hospital along with it in the same curtilage is in our view in accordance with the trend of modern development. It is an example of combination of the three different types of hospital which we consider would provide the best arrangement in the sub-regions. Wards for the chronic sick should also be provided.

405. *Peesweep Sanatorium, Johnstone.* This remote little unit was originally built as a rest home, and was converted to its present use in 1932. It is constructed on the open-air principle with 18 single rooms. It is rather inaccessible, and facilities are not good.

We therefore recommend that this institution should be abandoned for its present use; it might be retained as a holiday camp or youth hostel.

406. *Bridge of Weir Sanatorium.* This large group of buildings contains sanatorium orphan homes and a colony for epileptics with 130 beds.

The sanatorium consists of three blocks of three storeys each. The sanatorium and grounds occupy about ten acres out of the 700 belonging to the colony. At the present time (1944) about 200 beds are in use, but there are no public patients from Renfrewshire, although many other local authorities maintain patients in the institution.

We consider that very good work is done in the colony for epileptics, and suggest that it might be further developed as a national institution directed towards colonisation of epileptics.

The sanatorium does good work in the treatment of the less advanced or recoverable cases of pulmonary tuberculosis, and could continue to do so meantime in a regional scheme, but it requires closer linkage with a major chest unit. Possibly, in view of the extensive area of land associated, it might develop the colonising or rehabilitation side of the work.

407. *Craw Road Institution.* The original parts of this institution were built in 1849. The hospital section was built in 1890, and the infirm section in 1912. The latter is used as an emergency poor law hospital. The buildings are nearly all of stone, and the site covers 31½ acres. The hospital block has accommodation for 110 beds. The wards are fairly good and quite well provided with sanitary accommodation. The operating theatre is built on pillars reaching to the first floor and is unsatisfactory. There is a casualty section consisting of a theatre and X-ray room (containing a mobile unit) built by the Department of Health as an emergency addition.

This institution is out of date for the treatment of the sick, but might be of use for the care and training of certain types of mental cases—otherwise we recommend that it should be abandoned as an institution for the sick.

408. *Duncan M'Pherson Hospital, Gourock,* is a small but well built and equipped cottage hospital of 12 beds. It admits mainly medical and minor surgical cases, and is well suited for these purposes. The operating room is small, but has adequate equipment. There are no out-patient facilities, nor is there any radiological department. Kitchen premises and laundry are up to date in their equipment.

The facilities are fairly good for a unit of this size. We recommend that it be retained as a home hospital, restricting its normal work to the treatment of cases of the " general practice " type.

409. *Greenock Royal Infirmary, Greenock,* was built in 1865. It is a three-storey building with accommodation for 168 patients. The site is congested and situated in a poor quarter of Greenock. We are informed that proposals have been made to increase the accommodation at Larkfield Hospital, which is under the same Board of Managers, and to enlarge the out-patient facilities at Greenock Royal Infirmary at the expense of wards, and this appears to be a satisfactory arrangement. In this way, half of the existing beds could be retained for acute and emergency cases, while the main work is transferred to Larkfield. Already all medical cases requiring in-patient care are sent to Larkfield, and the aim should be to remove all in-patients except accident cases and emergencies, for which approximately 70 beds may be retained at the Royal Infirmary. Part of the accommodation thus set free could be utilised for extensive out-patient and casualty departments, X-ray, massage, and physio-therapy departments adequate for the large numbers of cases requiring treatment.

This large-scale reorganisation of the general hospital work of Greenock cannot be considered complete without equally radical reorganisation of the medical and surgical staffing. The present arrangement whereby the clinical work of this busy hospital is carried out by general practitioners subject only to once-weekly visits by a surgeon or physician is clearly unsatisfactory. The deficiency is most obvious on the surgical side, where much of the work is of an emergency character, and we are of opinion that it could only be remedied by the appointment of a staff of surgeons on a whole-time basis under the regional scheme.*

As with several other district hospitals, we would also draw attention to the deficiency in provision for investigation and treatment of medical cases and for pathological and bacteriological services.

410. *Larkfield Hospital, Greenock,* is a modern building of brick and rough-cast on a site of 6½ acres in a locality suitable for hospital development. This unit comprises the Rankin private block and the medical side of Greenock Royal Infirmary, extensions having been made to accommodate the latter. There are now 70 beds, including private wards. The operating theatre is large and well equipped with adequate anaesthetic room and sterilising room. The radiological department consists of a large diagnostic room and a dark room. There is a 4-valve X-ray set with three rotating anode tubes. The out-patient department of Greenock Royal Infirmary is used. Kitchen accommodation is modern and equipment is new and adequate.

We recommend this unit as suitable for expansion, to become the main district hospital of the area. The old building of Greenock Royal Infirmary would, of course, serve as the casualty and out-patient department as well as an emergency station.

411. *Broadstone Jubilee Hospital, Port Glasgow.* The buildings for this hospital date from 1907 and are well finished and fitted. The site is on a terraced hillside and is almost built up, although there is some vacant ground on the west side. There are 24 beds. The operating theatre is well fitted with

* We understand that since our visit was made the staffing reorganisation recommended above has been started by the appointment of a whole-time surgeon.

modern equipment and has a sterilising room. The radiological department contains a 1-valve unit in addition to a portable X-ray set. Kitchen and laundry premises although small are well equipped. The major surgical work is performed by a consulting surgeon from Glasgow, and there appears to be good co-operation with the four general practitioners who act as assistant surgeons and anaesthetists.

This well-equipped little cottage hospital performs a useful function for the treatment of surgical cases in a ship-building and industrial area. In our view it should be continued as a small accident out-station, but should be staffed by a fully-trained surgeon appointed to the Greenock group of hospitals and resident in the Greenock area.

412. *Sunnybank Children's Home, Port Glasgow,* was primarily intended for convalescent children from Broadstone Hospital. It is an old house (1840) and stands on a northern slope. The site covers 8 acres, and there is a large garden. The house is in good repair. There is accommodation for 15 beds—in one ward of 8 beds and one ward of 7 beds—which form the children's dormitories. The kitchen premises are satisfactory, having a range and an electric cooker. The staff consists of Matron, one staff nurse (or two), and two domestics.

Ultra Violet Ray is given to out-patients in what was the original billiard-room of the house, and there is also equipment on the first floor for resident patients.

413. *Eye Infirmary, Greenock,* is a small institution dating from 1893 and built of red brick. It deals with a considerable amount of accident work. There are 13 beds. The theatre is small, but sufficient for its purpose. A large amount of work is done in the out-patient department which is made up of a waiting hall, consulting room, and small dispensary. There is no laboratory or radiological department. Kitchen accommodation and facilities are good.

We recommend this unit as suitable for eye work, and it should be retained as such. It is essential to link this unit with Greenock Royal Infirmary as an integral part of its out-patient services.

414. *Ear, Throat, and Nose Hospital, Greenock,* is a modern hospital which provides 20 beds for in-patients and has a busy out-patient department. It already works in co-operation with Greenock Royal Infirmary, and at the time of the survey it existed only as an out-patient clinic.

We recommend that this unit continue its present function in co-operation with the Royal Infirmary under a regional scheme.

415. *Rankin Memorial Hospital, Greenock,* is a modern building of brick and roughcast. It is well finished and equipped, and the site of fifteen acres allows ample space for extension. There is accommodation for 56 beds—28 maternity cases and 28 children. The children's block is designed so that it can readily be converted into an additional maternity wing. Equipment and facilities are completely modern.

We recommend that the unit should be retained as a maternity hospital, but should be discontinued for children. It would provide about 50 maternity beds without new building.

416. *Gateside I.D. Hospital, Greenock,* is a well-planned institution, built of brick and roughcast. The various buildings have adequate facilities, and the site covers ten acres of high ground, close to Larkfield and Rankin Memorial Hospitals. Additions to the ward blocks could be readily made. Kitchen premises are fairly well equipped, and the laundry is well fitted, but could hold additional machinery. There is a resident medical superintendent, and the hospital is a training school for fevers.

We consider that this hospital should be retained as the central infectious

diseases hospital for West Renfrewshire. Being in close proximity to Larkfield Hospital, it offers facilities for co-operation with the general work.

417. *Smithston Institution, Greenock,* built of porous red sandstone, is situated on a steep slope which practically excludes sunlight from one side of the building. The hospital block is separate from the institution, but all general services are supplied from the institution. The theatre is small, and has a sterilising room, but is never used.

The hospital block and the institution generally are quite unsuitable for the treatment of the sick, and we recommend that the institution should be discontinued for that purpose.

418. *Princess Louise Hospital, Bishopton.* This hospital, which has accommodation for 150 patients, was established during the last war to deal with disabled Servicemen, and has continued to function as a Ministry of Pensions Hospital. Although before the war the numbers of patients were gradually diminishing, now, as would be expected, the hospital is again filling up. Special facilities in dealing with amputations, limb-fitting, and the treatment of paraplegics and occupational therapy are important contributions to the national hospital service. The site is an excellent one, and offers opportunity for almost indefinite expansion. The temporary huts which were erected during the last war are now out of date and should be replaced. A new nurses' home is also required.

The institution is well run for the benefit of the inmates, both temporary and permanent. As it will probably be used to the full for many years by the Ministry of Pensions, our only recommendation would be that it should offer training, etc., for civilian amputation cases and increase its accommodation for this important group.

419. *Mearnskirk Hospital, Newton Mearns.* (See under Glasgow Sub-region, para. 133.)

REQUIREMENTS OF THE SUB-REGION

420. The principal aggregations of population in Renfrewshire lead naturally to a division of the county for hospital purposes into an Eastern area centred on Paisley and a Western area based on Greenock. In examining the requirements of the sub-region we propose to recognise this division.

East Renfrewshire

421. The *eastern division* has a population of approximately 170,000, with Paisley (91,167), Renfrew (16,509), Johnstone (13,882), and Barrhead (13,265) as its principal towns. Paisley is the only " Large Burgh."

422. **General.** The Royal Alexandra Infirmary, Paisley (220 beds), and its auxiliary, the Glen-Coats Home (50), form the district hospital for the division. The only other general hospital is the Johnstone and District Cottage Hospital, also a voluntary institution. This hospital has 21 beds and is well equipped ; it should continue to serve as a home hospital for its neighbourhood, with the usual limitations of its type. The Royal Victoria Eye Infirmary, Paisley (16 beds), should be closely linked with the district hospital group.

423. The total bed accommodation for general hospital purposes is 307, giving a proportion of 1·8 beds per thousand of the population. It is estimated that the needs of the area, including the chronic sick, amount to 1000 beds; existing accommodation therefore falls far short of requirements.

424. The Royal Alexandra Infirmary, although well designed at the period of its construction, now requires extensive alterations to bring it up to modern standards. The present site offers little room for extension and the area is built up. In these circumstances we feel that the best function that the hospital could serve in the regional scheme is to become a hospital for casualties and emergency cases, with ample out-patient facilities for physio-therapy and other forms of clinic treatment. This would involve considerable alterations, and would reduce the bed capacity of the hospital to about 150, for casualty and accident work.

425. This arrangement, which we recommend, would leave some 750 beds to be provided elsewhere to meet the needs of the division for the care of the acute and chronic sick. We recommend the erection of a country hospital with this number of general beds, in conjunction with the hospital for pulmonary tuberculosis and chest diseases to which reference is made below. This country hospital, we assume, would in the first instance be of simple pavilion construction, like the E.M.S. hospitals which have rendered such valuable war service in other regions.

426. **The aged and infirm.** The only hospital serving the division is the Craw Road Institution, Paisley, which provides 227 beds for the sick. In our opinion this accommodation is out of date and unsuitable for the type of work undertaken. We recommend the transfer of those requiring hospital care to the country hospital referred to above, and the provision of simple hostel accommodation elsewhere for the aged and infirm.

427. **Maternity.** Existing hospital provision comprises Johnstone Maternity Hospital (39 beds) and Barshaw Maternity Home (35 beds). The estimated requirements for the division are 150 beds. The Johnstone Hospital, which is in excellent condition, should be extended to provide 60 beds ; and we understand that it is the intention of the Paisley Burgh Health Authority to close the Barshaw Home as soon as new building is permitted, and to erect a maternity hospital on grounds adjoining the present fever hospital. This proposal is strongly recommended, and we suggest that the new hospital should have 90 beds.

428. **Infectious disease.** The present accommodation consists of the modern Paisley Infectious Diseases Hospital (151 beds) and three small county isolation hospitals—Johnstone I.D. (56), Johnstone S.P. (40), and Darnley I.D. (40)—providing 136 beds in all. None of the three county hospitals is a satisfactory unit from the point of view of modern standards, and we recommend that they should all be closed. The requirement for the division is approximately 255 beds, of which 151 are already in being at the Paisley Fever Hospital. We recommend the enlargement of this hospital to serve as a central hospital for the division. This would involve the erection of an additional 100 beds.

West Renfrewshire

429. The *western division*, with a population of approximately 130,000, has its district hospital centre at Greenock. The distribution of hospital beds for the division is as follows :

430. **General.** The district hospital for the Western division is the Greenock Royal Infirmary (168 beds) with its annexe, Larkfield Hospital (70 beds). This voluntary hospital is at present undergoing an important transformation. The old hospital in the centre of the town is being adapted as a casualty unit for emergency work and accidents, with the provision of a large out-patient department, physio-therapy services, etc. This alteration, of which we cordially

approve, will have the effect of reducing considerably the number of beds in the old building to about 70. The main hospital will be transferred to Larkfield, where the environment is much more suitable for hospital development.

431. The other general hospital units in the division are the Duncan M'Pherson Hospital, Gourock (12 beds); the Broadstone Hospital, Port Glasgow (24 beds); the Eye Infirmary, Greenock (13 beds); and the new Ear, Throat, and Nose Hospital, Greenock (20 beds). The Gourock and Port-Glasgow units are excellent cottage hospitals, and should continue to function as such. We have referred elsewhere to the proposal to build a new cottage hospital at Skelmorlie, which will rely on Greenock for its district services. The Eye Infirmary and the Ear, Throat, and Nose Hospital at Greenock are excellent institutions; it is of great importance, however, that they should be closely linked with the Royal Infirmary in a regional scheme.

432. The total general hospital accommodation at present in the division may be estimated at 307, representing a proportion of 2·3 per thousand of the population. The estimated requirements for the division are 768 beds, and we recommend that the additional beds needed should be provided on the Larkfield site. This would mean that the Larkfield hospital which we contemplate would have a total accommodation for acute and chronic cases of about 600 beds, including the 70 already in existence, and making allowance for a reduction of beds at Greenock Royal Infirmary.

433. **The aged and infirm.** The only hospital providing beds specifically for this category is the Smithston Institution, Greenock. This poor law institution has undergone changes in accommodation in recent years, but the present estimate of beds for hospital patients is 114. The institution is unsuitable for the care of the sick, and should be abandoned for this purpose.

434. **Maternity.** The Rankin Memorial Hospital, Greenock (28 beds) is the only unit in the division providing this service. By the removal of children from one section of this modern building, the maternity accommodation could be raised to 56 without difficulty, as provision was made for this alteration in the constructional plans. The estimated needs for the division, however, are 110 beds, and it is evident that, even allowing for beds in cottage hospitals to deal with normal cases, a very considerable increase in accommodation will be required.

We recommend that the Rankin Memorial Hospital be further extended to provide a total of 110 beds. It should work in close association with the general hospital at Larkfield.

435. **Infectious disease.** The only infectious diseases hospital in the division is Gateside I.D. Hospital, Greenock (104 beds). If tuberculosis patients are removed, the total bed accommodation would amount to 124. The estimated requirements for the whole division are 172 beds, and we recommend that the additional beds be provided at the Gateside Hospital.

436. **Pulmonary Tuberculosis.** The provision of hospital accommodation for pulmonary tuberculosis is applicable to the county as a whole and cannot be separated into divisions. The existing accommodation is distributed as follows:

Darnley I.D.	18
Johnstone I.D.	30
Paisley I.D.	30
Gateside I.D., Greenock	20
Peesweep, Johnstone	18
Bridge of Weir Sanatorium	20
	136

The distribution of patients suffering from pulmonary tuberculosis into small hospital units is unsatisfactory from the point of view of hospital care and unsuited to modern methods of occupational therapy and rehabilitation. In the large towns of Paisley and Greenock, however, there is a case for retaining a small number of beds to serve as a clearing-house, and accordingly we recommend the retention of 30 beds for this purpose at Paisley I.D. Hospital, and 20 beds at Gateside, Greenock. The tuberculosis wards at the other hospitals should be closed with the hospitals themselves.

The Bridge of Weir Sanatorium, although situated in the County of Renfrew-does not normally receive public patients from this sub-region. We therefore discount its accommodation except to the extent of 20 beds.

437. The estimated requirements for the treatment of pulmonary tuberculosis in the sub-region are 340 (on a basis of 2 beds per annual death), and it is clear that a new institution will be required to serve the needs of the area. We recommend that a new institution of not less than 250 beds be erected, providing hospital treatment for diseases of the chest, sanatorium care for convalescent patients, and facilities for occupational therapy and subsequent rehabilitation. This institution should be associated with the 750-bed country general hospital recommended on para. 347 above.

At present there is no institution in the County for the treatment of persons suffering from non-pulmonary tuberculosis. We recommend that arrangements be made for this purpose with the Victoria Infirmary Annexe at Philipshill, near Busby. It may be convenient to send children who do not require active surgical treatment to St Andrew's Home, Millport.

SUMMARY

438. The Renfrewshire Sub-region as a whole is deficient in hospital accommodation of all types. This deficiency, especially as regards the landward areas, is due in large measure to the reliance placed in the past on the Glasgow hospitals for " district hospital " services. We feel that the time has come for the County to become self-sufficient in respect of district services, continuing to rely upon the central Glasgow hospitals for medical treatment of a highly specialised kind. This general conclusion is subject to one qualification, noted above, that certain areas in the immediate neighbourhood of the City—with a population of approximately 16,000—will continue to look to Glasgow for " district " as well as specialised services.

439. The second point, which requires restatement in summary form, is that the sub-region is readily divisible, for hospital purposes, into two sections, an Eastern division centred on Paisley, and a Western division centred on Greenock. It should hardly be necessary to add that, in referring to these divisions, we do not contemplate any alteration in local authority administration—a matter which is outside the terms of our reference. We merely refer to the fact that the two divisions make a convenient grouping for our present purpose, and have no other considerations in mind. In this connection, however, we must mention that, while the large towns such as Paisley in the east and Greenock in the west have relatively good hospital accommodation for their own requirements, there is an urgent need for regional co-operation in order to provide for the landward areas in the respective divisions.

440. Our third point is that, even assuming the best possible " regional " or group co-operation between town and county, there is still a gross deficiency in hospital accommodation for (*a*) general cases, including the chronic sick, and (*b*) patients suffering from pulmonary tuberculosis. In our opinion this deficiency could best be met by the construction of a new country general hospital of simple and flexible design, on the outskirts of one of the large

towns, yet providing all the benefits of rural surroundings. This general hospital should serve town and country alike, and, in addition to its general and special beds, provide the sub-regional centre for the treatment of pulmonary tuberculosis and other disorders of the chest.

441. Satisfactory arrangements for the treatment of infectious disease are already in existence at Paisley and Greenock, the only improvement necessary being minor additions to bed accommodation in order to provide for the needs of the landward areas.

442. The nucleus of excellent maternity accommodation is in existence at Greenock and Johnstone, and in contemplation at Paisley. The immediate need is for co-operation on the sub-regional basis in such a way as to offer to each patient the most convenient hospital service as near as possible to her own home. This means in plain terms that the Rankin Memorial Hospital would provide for the needs of the whole Western division, and that Paisley and Johnstone would divide between them the responsibility for maternity provision in the Eastern division.

443. Under the E.M.S. arrangements a central laboratory has been set up in the grounds of the Paisley Fever Hospital. We hope that an arrangement of this kind, to serve the whole sub-region, will be continued and extended after the war.

444. We are satisfied that in this important sub-region there should be self-sufficiency in district hospital services. This involves, in our opinion, the appointment of full-time key surgical, medical, and specialist staff at the principal hospitals. These practitioners should be resident in the areas which they serve. We are glad to observe that a movement in this direction has already been taken in relation to the Greenock Royal Infirmary.

STIRLINGSHIRE AND CLACKMANNAN SUB-REGION

INTRODUCTION:

445. The population of the counties of Stirling and Clackmannan in 1938 was estimated at 206,527 (Stirling, 173,410; Clackmannan, 33,117), and is mainly concentrated in the eastern half of Stirlingshire and in Clackmannan. For hospital purposes this area would constitute a compact sub-region served by the hospitals located in Stirling, Falkirk, and Alloa. It will also be found that part of West Perthshire, including Doune, Dunblane, Callander, and the area northwards to Killin, regards Stirling as the most convenient hospital centre, and the populations should therefore be included in estimating the needs of the sub-region. A portion of the detached part of Dunbartonshire drains towards Falkirk and should in the same way be included. The sparsely populated western part of Stirlingshire, on the other hand, is more naturally served by Glasgow, and should be provided for by the Glasgow Sub-region.

446. The population of the Stirling and Clackmannan Sub-region as thus delimited is between 200,000 and 210,000. Of this number, almost half are aggregated in or close to Falkirk, almost a quarter in or close to Stirling, and almost a sixth in Clackmannan. The district is mainly of an industrial character, the principal industries being metal working, mining and quarrying, and textiles.

447. The hospital accommodation in the sub-region is summarised as follows :

Type.	Hospital.	Beds.	
General	Stirling Royal Infirmary	266	
	Falkirk Royal Infirmary	456	
	County Hospital, Alloa	42	
	Denny and Dunipace Cottage Hospital	16	
	Victoria Memorial Hospital, Kilsyth	11	
	(Killearn E.M.S. Hospital—Glasgow Sub-Region)	—	
		—	791
Maternity	No maternity hospitals, but 45 beds in Stirling and Falkirk Royal Infirmaries.		
Infectious diseases	Camelon Infectious Diseases Hospital	64	
	Bannockburn Infectious Diseases Hospital	80	
	(Lennox I.D. Hospital—Dunbarton County)	—	
	Falkirk Infectious Diseases Hospital	72	
	Infectious Diseases Hospital, Alloa	58	
	Kildean Infectious Diseases Hospital, Stirling	30	
		—	304
Tuberculosis	Ochil Hills—Joint Hospital	110	
	Camelon Infectious Diseases Hospital	16	
	Bannockburn Infectious Diseases Hospital	20	
	Falkirk Infectious Diseases Hospital and Sanatorium	35	
		—	181
Poor Law Sick Beds	Blinkbonny Home, Falkirk	69	
	Orchard House, Stirling	76	
		—	145

The following is a brief description of the hospitals :

General Hospitals :

448. *Falkirk Royal Infirmary* was built in 1931, and is located within the burgh of Falkirk. The site extends to 23 acres, leaving some space for additions to the hospital. The ground levels have presented some difficulties as regards the original part of the hospital. Besides the original 204 beds there are 9 E.M.S. huts of standard pattern. The total accommodation in the hospital is therefore 564 beds. This figure on a peace-time standard should be reduced to 456.

Patients' accommodation is disposed in wards of 20–22 beds and in smaller wards and single rooms. The medical and surgical wards open from the south side of the main east to west corridor. The sanitary annexes are sufficient and well arranged. Surgical facilities are adequate. The maternity unit is a single-storey building connected with the main corridor. It has 25 beds with two labour rooms. One room is provided for isolation. Private patients are treated in the single or double rooms attached to the main wards. Nurses are housed in the adjacent Gartcows House and in a partitioned ward block. In another similar block the domestics are accommodated. Nurses' and maids' accommodation is inadequate. The out-patient department is fairly extensive and has provision for special clinics and casualties. More space will be required in the future. The laboratory is small and severely cramped for space.

The hospital, having been built in 1931, is fairly modern, and in our view should remain as a district hospital, taking part in a regional scheme in collaboration with Stirling Royal Infirmary and the County Hospital, Alloa. It requires a new nurses' home and fuller laboratory accommodation. The out-patient centre will also have to be enlarged, particularly if systematic attention is to be paid to orthopaedics. There is also need for enlargement of the X-ray department.

449. *Stirling Royal Infirmary* is a voluntary hospital of 126 beds, built in 1931, located on the outskirts of Stirling on ground extending to about 23 acres. Additional hutted accommodation has been erected by the Depart-

ment of Health, consisting of 6 huts, one of which is at present used for nurses' accommodation. The total accommodation is 326 beds, although on peace-time standards we would put the figure at 266.

The main building consists of an administrative block in the form of a hollow square connected by corridor with three two-storey ward blocks, one single storey children's ward block, and a maternity block. General medical and surgical accommodation is provided in the three two-storey blocks and consists of six large wards of 16–18 beds, each with a single-bedded side-room. The children's ward is of similar design. All have spacious balconies facing south and are of modern design and well equipped. The maternity unit has two wards of 8 beds each, three single or double rooms, and one isolation room. There is one labour room. The unit is of modern design, but somewhat cramped for space. The out-patient department contains a small waiting room with consulting and treatment rooms, and there are rooms also for X-ray examination and physio-therapy. The venereal diseases department is contained in a separate small two-storey house with six beds and out-patient accommodation. There is no laboratory—only a small test-room. The kitchen, boiler-house, and laundry are adequate, though somewhat crowded. The nurses' and maids' accommodation is in the main administrative building, and is somewhat restricted.

There is a Convalescent Home of 20 beds, the Victoria Convalescent Home, Chartershall.

The Infirmary is a modern building in an open site capable of expansion. The hospital, however, has certain deficiencies and requires among other things a laboratory adequate in size, equipment, and staff to do the pathology, bacteriology and biochemistry for the district. There is also required an additional nurses' home. The out-patient department is very cramped and inadequate for the numbers of patients who attend. A larger X-ray department is necessary, with separate rooms for investigational work. For adult orthopaedic cases, an examination room and a plaster room are necessary, and additional space for physio-therapy and occupational therapy. If urological surgery is to be undertaken in this district, then suitable accommodation is required for that purpose. A second operating theatre is also required. We would criticise the maternity block in which the receiving ward is too small and the isolation accommodation, which consists of only one room, is not sufficient. There is a tendency to overcrowding. We also consider that a second labour room is desirable.

These defects, enumerated above, do not detract from the general conclusion that as a district hospital the institution is well run and the patients' accommodation in general is pleasant and not overcrowded. The beds are at about 7–8 feet centres. There is also very considerable local interest in the institution and its further development in collaboration with the other voluntary and county hospitals in the area. It should be continued as a district hospital with combined staffing arrangements for specialists with Falkirk Royal Infirmary and the County Hospital, Alloa, the three forming in effect a single administrative unit in three portions. For long-term cases it might be necessary to have beds in a country hospital either in Stirlingshire, *e.g.*, Killearn, or elsewhere. An Orthopaedic scheme could be formed to cover the area and provide the necessary facilities for rehabilitation at Falkirk and Stirling.

The Stirlingshire, Clackmannanshire, and West Perthshire Divisional Committee for Hospital Services has given much consideration to the question of unifying and co-ordinating the hospital services in the Counties of Stirling, Clackmannan, and in West Perthshire. For general hospital purposes, Stirling Royal Infirmary, Falkirk Royal Infirmary, and the County Hospital, Alloa, work in co-operation in certain respects. The same radiologist works in the three hospitals, and the treatment of orthopaedic cases is also to some extent unified although there is not a complete orthopaedic scheme as such.

450. *Clackmannan County Hospital, Alloa,* is a voluntary hospital of 42 beds, situated in Alloa on a restricted site of about one acre. The hospital was erected in 1899, and has been extended more recently. The patients' accommodation includes two wards of 14 beds, one 4-bed room, one 2-bed room, and four single rooms. There is an operation room and a small X-ray room. A nurses' home has been added recently. The work of the hospital is almost exclusively surgical. The active staff consists of two general practitioners who act as surgeons, and a visiting radiologist.

The hospital may be classified as intermediate between a small district hospital and a cottage hospital. It would seem to be well suited to act, within a regional scheme, as a hospital for emergency work and for the institutional care of patients requiring general practitioner services.

451. *Denny and Dunipace Cottage Hospital* is a cottage hospital of 16 beds, situated on the outskirts of Denny on a site of about $1\frac{1}{2}$ acres. The hospital was built in 1899, but has been extended since. It is of single-storey red brick construction, and is in good condition and well equipped. It appears to be performing a very useful function as a cottage hospital, and we recommend its continuance.

452. *Kilsyth and District Victoria Memorial Cottage Hospital* is a cottage hospital of 11 beds, situated on the outskirts of Kilsyth on a site of about one acre. It was built about 1902, and is of red brick construction. Patients' accommodation is disposed in two wards of 6 and 5 beds respectively. The wards are rather cramped for space, and the sanitary accommodation is inadequate. The kitchen, scullery, and other offices are small and poorly equipped. A small room, opening directly into the front passage, is used as an operating theatre. All the local practitioners are on the staff.

The structure and equipment of this hospital do not conform to modern standards, and neither accommodation nor staff are such as to render the hospital suitable for surgical work. We consider, however, that with a good deal of rebuilding and equipping it could be fitted to serve the function of a combined health centre.

INFECTIOUS DISEASES HOSPITALS:

453. *Clackmannan County I.D. Hospital, Alloa,* is situated in open country on the outskirts of Alloa. There are 58 beds in single-storey pavilions, distributed in seven wards. The original buildings date from 1885. A new block was opened in 1939. The kitchen and stores and laundry are good, and the same may be said of the central heating system.

This fever hospital renders useful service to Alloa and the County of Clackmannan, but in our opinion the treatment of infectious disease and of tuberculosis should be centralised for Stirlingshire, Clackmannan, and the Burghs therein. There is at present no really satisfactory hospital for infectious disease in this area, and we have recommended elsewhere that the smaller infectious diseases hospitals at Camelon (para. 455) and Kildean (para. 457) should be used for other purposes. The hospital at Bannockburn (para. 454) might be enlarged to make a central hospital for the area. The site at Bannockburn is convenient but not very attractive and, except for the tuberculosis and orthopaedic wards, the structure is out of date. We feel that a better site could be chosen, perhaps on the southern slopes of the Ochil Hills near Stirling, and that a new central hospital for the area should be built to deal with infectious disease, diseases of the chest (including pulmonary tuberculosis), and selected long-term medical cases.

If this view is accepted we recommend that the Infectious Diseases hospital at Alloa be used for the care of the chronic sick, and perhaps also maternity in association with the County Hospital, Alloa.

454. *I.D. Hospital, Bannockburn,* is a hospital of 100 beds, 20 of which

are reserved for tuberculosis. It is owned by Stirling County Council and located in country surroundings close to Bannockburn. The administrative block and one ward block were built about 1900, and a second ward block in 1908. In these blocks the beds are disposed in one large ward of 16 beds, three small wards of 6–9 beds, and three rooms of 2–4 beds. More recently three blocks have been erected, with patients' accommodation in 21 cubicles of three beds each.

At present this institution is too small to be an efficient unit. There is no resident medical officer. The site, however, is central and suitable for further extension and the institution might be retained and extended as the central infectious diseases hospital for Stirlingshire. There is no place, in our view, for the treatment of non-pulmonary tuberculosis cases in small groups of 20 beds, and therefore we consider that these cases should be sent elsewhere to a fully developed orthopaedic hospital. If a more attractive site can be found, we suggest that a central hospital for (*a*) infectious disease and (*b*) diseases of the chest (including pulmonary tuberculosis) should be constructed for the whole area of Stirlingshire, Clackmannan, and the Burghs of Stirling and Falkirk (see para. 456).

455. *Camelon I.D. Hospital* has 80 beds, including 16 for tuberculosis, owned by Stirling County Council. The buildings are of stone and were erected in 1896 in an urban situation at Camelon, near Falkirk. Accommodation for patients is disposed in one ward of 16 beds, five wards of 8 beds, and eight rooms of 1 to 3 beds.

This hospital is in good repair, and under a regional scheme it might well be used for the care of the aged and infirm.

456. *Falkirk I.D. Hospital and Sanatorium* is a hospital of 72 beds for infectious diseases and 35 for tuberculosis, owned by the Burgh of Falkirk. The hospital lies on an extensive site on a hill to the south of Falkirk. Patients' accommodation is in five pavilions. One of these is a brick and rough-cast building of butterfly shape, with 26 beds disposed in 8-bed, 4-bed, and 3-bed wards, and is used for tuberculosis. It is in good order and suitable for its purpose. The pavilions are of brick and corrugated iron. (One is partitioned into six cubicles each of four beds.) They are in good order, but do not conform to modern requirements. The fifth pavilion is a small wooden building not now in use. The administrative block, stone-built, appears to be in satisfactory condition. The nurses' home is a separate brick building, which was extended in 1938, and appears to be satisfactory. There is one resident medical officer; and the hospital is a training school for nurses for the fever certificate.

This hospital is inadequate in so far as it lacks laboratory and radiological facilities, and is too small to function as a thoroughly efficient and up-to-date infectious diseases hospital. Four of the pavilions are of temporary construction. There is, of course, plenty of vacant ground surrounding the hospital for further extension. The question of its future depends upon the ultimate selection of the site for the major infectious diseases hospital for the Counties of Stirling and Clackmannan, and also upon the ultimate decision as to how pulmonary tuberculosis is to be provided for in that area. The hospital should either be extended to a sufficiently large size to warrant full equipment and staff or should be diverted to other purposes. In view of our general recommendations for the area (para. 464) we subscribe to the latter proposal.

457. *Kildean Fever Hospital* has 50 beds (but better stated as 30) for infectious diseases. It is owned by Stirling Town Council, and is located at Drip Road, Stirling. Patients' accommodation is in two single-storey stone pavilions. A third pavilion of "Speirsesque" construction is now used for

out-patient treatment of scabies. With the exception of the third pavilion, the buildings are in good order.

Under a regional scheme this hospital might well be adapted for the care of the aged and infirm, or perhaps as a day nursery or nursery school.

POOR-LAW INSTITUTIONS:

458. *Blinkbonny Home* is a poor law institution owned by Falkirk Burgh, situated in Falkirk on a site of about 3½–4 acres. The hospital portion contains 69 beds disposed in seven wards of 9–10 beds each. The wards are overcrowded, and the sanitary accommodation is limited, but in other respects the accommodation is not unsatisfactory.

Failing other provision being made, it would seem reasonable that this institution should continue as a home for the aged and infirm. On the other hand it is a great advantage for aged and infirm persons to have their quarters at ground level, with adjacent garden space.

459. *Orchard House Poor Law Institution* is a poor law institution with a hospital portion, and dates from about 1860. The hospital was built in 1900, and contained 76 beds, disposed in wards of 14–20 beds and of 6–9 beds.

Accommodation is on the usual poor law standard.

This hospital is in good condition, but it is not adequately equipped, and therefore unsuitable for the treatment of the sick, particularly of those suffering from diseases requiring a great deal of nursing attention. We recommend that it should not be used in future for the treatment of the sick.

TUBERCULOSIS HOSPITALS:

460. *Ochil Hills Sanatorium* is on a site of 450 acres on the Ochil Hills near Milnathort in the County of Kinross. The main building consists of a three-storey block of red sandstone, and in addition there are three single-storey pavilions of brick and plaster. Altogether there is accommodation for about 110 patients. It is controlled by a Joint Board of Stirling County and Burgh, Clackmannan County, and Dunfermline Burgh, and receives patients from all these authorities. In addition, approximately 50 beds are reserved on a customer basis for patients from the City of Glasgow.

The sanatorium is in good structural condition, and is suitable for the treatment of tuberculosis cases in the convalescent stage.

REQUIREMENTS OF THE SUB-REGION

461. In setting forth the requirements of the sub-region we have taken a standard of six beds per 1000 for general hospital purposes, having in view the industrial but not highly urbanised character of the counties.

The following table shows the existing accommodation and the estimated requirements for a comprehensive service:

HOSPITAL.	EXISTING BEDS.	BEDS ON PEACE-TIME STANDARD.	ESTIMATED TOTAL REQUIREMENTS.	DEFICIENCY.
General	914	746	1200	454
Maternity	45	45	150	105
Infectious diseases . .	304	304	300	—
Pulmonary Tuberculosis .	181	181	146	(Surplus 35)

There are 145 beds for sick poor persons in poorhouses. We think that the county would require 300 to 400 beds for the aged and infirm, estimated at 1·5 per 1000 for this group.

462. For general hospital purposes there is, on the standard mentioned, a deficiency of 454 beds. We do not, however, feel that there is an immediate necessity to make such a number available, but rather suggest that the sub-region could continue with its present number—746, which is almost 4 per 1000 of population. The fact that there are two major hospital units and one smaller one, all capable of serving the more important areas, makes it difficult to decide where any additional accommodation should be placed. The ideal would be a large centralised country hospital with the three existing hospitals acting as feeders; but the size and importance of Stirling and Falkirk Infirmaries suggest that some of the extra accommodation might be added to them, although we think their location—and this especially applies to Falkirk—is not ideal. A country hospital of 300–400 beds might some day be constructed and in it the major considerations might be the treatment of children, including orthopaedics, and also the provision of a section for maternity and one for pulmonary tuberculosis.

463. Maternity accommodation is very deficient. At least 150 beds are needed. This suggests either a centralised institution or one in each of the three centres, Stirling, Falkirk, and Alloa. Extensions could be made only to a limited extent, if at all, to the Stirling and Falkirk units as they stand, and in any case they are deficient in some of the main essentials, such as isolation space and sick infants' accommodation. Entirely new units are required, and should be provided either as new buildings at Stirling and Falkirk Royal Infirmaries and at Alloa or in a centralised county hospital.

464. For infectious diseases the number of beds in existence is adequate, but the institutions are small and should be replaced by one large centralised infectious diseases hospital. This hospital might quite well be constructed in juxtaposition to the suggested new county general hospital.

465. New arrangements are necessary for the treatment of pulmonary tuberculosis. The wards in the fever hospitals should be discontinued for that purpose and additional provision could be made at Ochil Hills, an institution which might be enlarged. If this were done it would continue to serve the sub-region as well as the other authorities in its present Joint Board. On the other hand, if a centralised county hospital were to be built as suggested, then a block of wards could be set aside for the treatment of pulmonary tuberculosis, and this in our view would be more satisfactory as a long-term plan. The total requirements of the two counties is about 146 beds, which is probably just small enough to carry an independent hospital which would be efficient in all respects. It might, on the other hand, ultimately be considered a better plan to combine with some other authority and retain within the sub-regional scheme no more than a few beds at suitable centres for observation and local convenience.

466. For aged and infirm persons some 145 beds in poor law institutions are available, but the accommodation is out of date and unsatisfactory, although its standard is by no means inferior to that generally available for such cases. The local hostel system should be considered, but we recommend as a part solution that the present infectious diseases hospitals be altered and adapted for this purpose, if and when they are replaced by a centralised fever hospital.

SUMMARY

467. The Stirlingshire and Clackmannan Sub-Region has a sufficiently compact grouping of the population to warrant the development of a single, fully co-ordinated hospital service. This view has already been accepted by the authorities on the spot, both voluntary and local government, and considerable progress has been made towards effective co-ordination of hospital facilities

for the general sick. We hope that this co-operative enterprise will be extended to cover the whole range of provision for the sick.

468. The two general hospitals at Stirling and Falkirk are modern. Deficiencies as regards out-patient accommodation, laboratory, X-ray department, and nurses' home could no doubt be made good by additional building. There is a shortage, however, in the number of beds available. For example, there is not sufficient provision for children, either for short term or long term cases. The same is true as regards medical cases, both acute and chronic ; and there is no provision at all for mental observation or psychiatry.

469. Maternity hospital provision is also very deficient in amount, while for infectious diseases and tuberculosis, although there are enough beds, they are in institutions too small to support adequate medical and other services.

470. The fever hospitals are all small units, and they should be replaced by a single large hospital which could carry the necessary resident medical staff, laboratory, theatre, X-ray equipment, etc., and provide adequate training facilities for nurses. The treatment of pulmonary tuberculosis in wards in a small fever hospital is also unsatisfactory and should be discontinued.

471. Taking all these matters into consideration, we are forced to the conclusion that a fully developed hospital service for the sub-region would require the construction of a central hospital to deal with the following groups: (*a*) general medical and surgical cases, including the chronic sick, and with a special department for children ; (*b*) maternity ; (*c*) infectious disease for the whole sub-region ; and (*d*) tuberculosis of the lung and other disorders of the chest. The Ochil Hills Sanatorium could be made suitable for the care of convalescent cases of tuberculosis, with provision for occupational therapy and rehabilitation.

472. We believe that a long-term scheme of this kind could well be carried out in stages. First, a site of fifty to a hundred acres with a good southern exposure and within easy reach of the centres of population might be selected and a comprehensive layout prepared. A country hospital of simple design could then be erected by degrees, but always in harmony with the master plan. In our view the order of priority would be pulmonary tuberculosis, maternity, infectious disease, and the general (including the chronic) sick. When the scheme was fully developed, the general hospitals at Stirling and Falkirk would devote their attention especially to acute and emergency cases, to out-patient work and physio-therapy.

TABLE A.

CLASSIFICATION OF HOSPITAL BEDS BY COUNTY (1938)—WESTERN REGION

County.	General Medical	General Surgical	Interchangeable.	Children Medical.	Children Surgical.	Maternity.	Gynaecology.	Ear, Nose and Throat.	Ophthalmic.	Orthopaedic.*	Skin.	Dental.	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	Smallpox.	Venereal Diseases.	Infectious Diseases.	Fractures.	Thoracic Surgery.	Plastic Surgery.	Neurological.	Observation.	Chronic Sick.	Other.	Total.
Argyll . . .	—	—	63	2		28	—	—	—	—	—	—	26	5	—	—	177	—	—	—	—	—	63	9	373
Ayr	306	362	652	32		169	21	82	14	15	—	3	214	—	—	—	552	21	—	—	—	16	145	—	2630
Bute . . .	—	—	32	—	—	12	—	—	—	—	—	—	7	188	—	—	49	—	—	—	—	—	24	—	312
Clackmannan .	—	40	4	—	4	—	—	—	—	—	—	—	10	—	—	—	32	—	—	—	—	—	—	—	90
Dumfries, Wigtown and Kirkcudbright	66	95	119	20		71	10	7	3	—	—	—	132		—	—	193	—	—	—	—	—	28	5	749
Dunbarton . .	—	16	265	98		3	—	—	—	—	—	—	52	—	—	—	281	—	—	—	—	2	124	2	843
Lanark . . .	196	90	1921	87		176	18	26	—	514	4	—	660	261	—	6	639	—	40	—	—	60	321	32	5051
Glasgow . .	1596	1400	102	823		446	418	389	197	12	248	—	625	210	40	98	1982	9	—	—	—	446	1118	176	10,335
Renfrew . .	269	234	417	134		71	—	26	31	50	12	—	512	250	40	10	371	—	—	—	—	12	155	6	2600
Stirling . . .	340	258	16	46		45	12	4	4	190	—	—	63	20	—	17	292	—	—	—	52	—	140	59	1558
Total . .	2773	2495	3591	1246		1021	479	534	249	781*	264	3	2301	934	80	157	4568	30	40	0	52	536	2118	289	24,541
Percentage .	11·30	10·17	14·63	5·08		4·16	1·95	2·18	1·01	3·18	1·07	0·01	9·38	3·81	0·33	0·64	18·61	0·12	0·16	—	0·21	2·19	8·63	1·18	100·00
		36·10																							

* See also Non-Pulmonary Tuberculosis which is listed separately.

ORIGIN OF PATIENTS ADMITTED TO GLASGOW HOSPITALS

Table B 1, which is based on information given by hospitals on the survey questionnaire for 1938, indicates the extent to which Glasgow institutions are utilised by in-patients from other districts. The voluntary general and independent specialised hospitals take in a considerable number of such cases, *e.g.*, the David Elder Infirmary admitted 263 patients from outwith Glasgow Burgh in a total of 747 admissions. Similarly, of 1910 admissions to the Glasgow Eye Infirmary, 873 came from outside Glasgow. Redlands Hospital admitted 250 outside cases out of a total of 975 ; the Royal Hospital for Sick Children 2379 out of 6783 ; and the Samaritan Hospital 1483 out of 2441. Over a third of the admissions to the Victoria, the Western, and the Royal were from outside areas, the Royal Cancer Hospital admitted 309 out of 546, and the Ear, Nose and Throat Hospital, 1444 out of 2959—or almost 50 per cent.

Table B 2 shows the cases admitted to five Glasgow Hospitals from areas near the city, including districts which the Surveyors consider would normally continue to send cases to Glasgow. Thus the total number from these districts admitted to the Western Infirmary was 2624 as compared with 5587 from all districts outside of Glasgow. The Victoria Infirmary admitted 842 from this restricted area out of a total of 3325, and the Samaritan 454 out of 1483. Comparative figures for four hospitals may be summarised as follows :—

Hospital.	Admissions from outside Glasgow.	Admissions from Adjacent Districts.	Percentage from Adjacent Districts.
Royal Infirmary	6710	1751	26%
Western Infirmary	5587	2624	47%
Victoria Infirmary	3325	842	25%
Royal Samaritan Hospital . .	1483	454	30%
	17,105	5671	33%

DISTRIBUTION OF PATIENTS

Hospital.	Glasgow Burgh.	Airdrie Burgh.	Coatbridge Burgh.	Hamilton Burgh.	Motherwell Burgh.	Rutherglen Burgh.	Lanark County.	Stirling and Clackmannan County.	Dunbarton County.	Renfrew County.	Ayr County.	Argyll County.	Bute County.	Rest of Scotland.	Total out-with Glasgow Burgh.	Total.
Voluntary—																
David Elder Infirmary . . .	484	1	2	2	22	5	22	24	81	29	55	16	4	24	263	747
Ear, Nose and Throat . . .	1515	59	61	68	73	80	372	36	252	160	226	31	8	18	1444	2959
Glasgow Eye Infirmary . . .	1035	31	47	36	47	26	214	67	128	27	175	5	15	57	875	1910
Homoeopathic	246	1	2	—	3	11	17	6	25	20	27	2	2	9	124	370
Redlands	725	2	6	2	8	29	19	32	59	35	28	15	3	12	250	975
Royal Cancer	237	8	15	5	16	8	62	22	24	61	53	4	9	22	309	546
Royal Hospital for Sick Children	4304	58	145	74	114	41	622	102	500	318	270	49	11	75	2379	6683
Royal Infirmary	8740	290	446	296	454	317	3155	281	445	237	506	110	12	161	6710	15450
Royal Maternity	4086	5	8	36	1	119	7	5	483	12	5	20	—	27	728	4814
Royal Samaritan	1958	52	56	86	140	10	136	40	122	384	359	27	26	45	1483	3441
Victoria Infirmary	7504	44	75	135	90	242	533	66	117	1235	487	138	45	118	3325	10829
Western Infirmary	7198	56	33	45	191	38	414	119	2260	687	1084	253	48	359	5587	12785
Local Authority—																
Baird Street	124	—	2	—	—	2	—	4	7	—	13	—	—	—	28	152
Eastern General	3150	—	—	—	—	3	1	—	2	—	—	—	—	—	6	3156
Mearnskirk	505	1	8	3	—	3	1	1	2	1	1	8	1	1	31	536
Belvidere I.D.	5417	—	—	1	1	130	2	2	7	6	2	4	1	—	156	5573
Ruchill I.D.	6406	1	1	—	—	22	3	1	6	14	5	1	—	1	55	6461

Patients admitted to Barnhill, Knightswood, Robroyston, Eastern General, Scotstoun House, Shieldhall I.D., Southern General, Stobhill, Western General, and Elder Cottage Hospitals, all came from Glasgow.

TABLE B2

CASES ADMITTED TO GLASGOW HOSPITALS FROM ADJACENT POPULATIONS

	Lanarkshire.					Stirlingshire.						Renfrewshire.				Dunbartonshire.				Bute.	Argyll.	Total.
	Rutherglen.	Cambuslang.	Cadder.	Old Monkland (Part).	Total.	Baldernock (Part).	Buchanan (Part).	Drymen (Part).	Killearn (Part).	Campsie (Part).	Total.	Cathcart (Part).	Renfrew (Part).	Paisley (Part).	Total.	New Kilpatrick.	Old Kilpatrick (Part).	Kirkintilloch.	Total.			
Royal Infirmary . .	348	325	250	162	1085	2	—	7	10	65	84	—	9	130	139	57	35	224	316	15	112	1751
Western Infirmary .	47	32	27	9	115	—	—	13	2	18	33	—	285	124	409	179	1505	82	1766	48	253	2624
Victoria Infirmary .	275	46	13	24	358	—	—	—	2	2	4	—	33	199	232	34	24	7	65	45	138	842
Royal Samaritan Hospital .	42	51	17	6	116	—	—	—	3	3	6	13	41	172	226	8	69	16	93	2	11	454
Ophthalmic Institution	58	38	97	47	240	—	—	1	3	14	18	—	10	58	68	22	48	46	116	2	23	467

INDEX OF HOSPITALS

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